ORDER NO. AD9111274A2

Service Manual

Simplified

Dolby NR-Equipped
Stereo Cassette Deck

DOLBY B·C NR HX PRO

Cassette Deck

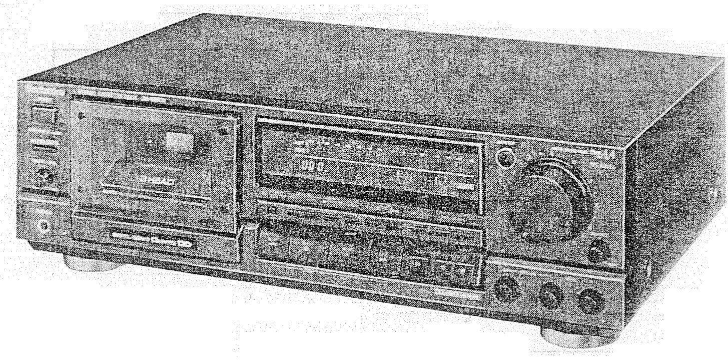
RS-BX808

Color

(K)... Black Type

Area

Country Code	Area	Color
(EB)	Great Britain.	(K)
(EG)	F.R. Germany and Italy./Continental Europe.	



∗HX Pro headroom extension originated by Bang Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY", the double-D symbol, and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

- **Please file and use this manual together with the service manual for Model No. RS-BX707, Order No. AD9106170C2 (EB, EG).**
- **This service manual indicates the main differences between; Original RS-BX707 (EB, EG).**
- **Refer to the mechanism parts list and exploded views of this service manual.**

CHANGES

RS-TR555 MECHANISM SERIES (AR350)

SPECIFICATIONS

RS-BX707 (EB, EG)

■ CASSETTE DECK SECTION		■ GENERAL	
Wow and flutter	0.05% (WRMS) ±0.14% (DIN)	Power consumption	20W
		Weight	5.0kg (11lb.)

⬇

RS-BX808 (EB, EG)

■ CASSETTE DECK SECTION		■ GENERAL	
Wow and flutter	Change 0.03% (WRMS) ±0.09% (DIN)	Power consumption	Change 22W
		Weight	5.3kg

Technics

■ CHANGE IN REPLACEMENT PARTS LIST (on pages 32, 39, 40, 42.)

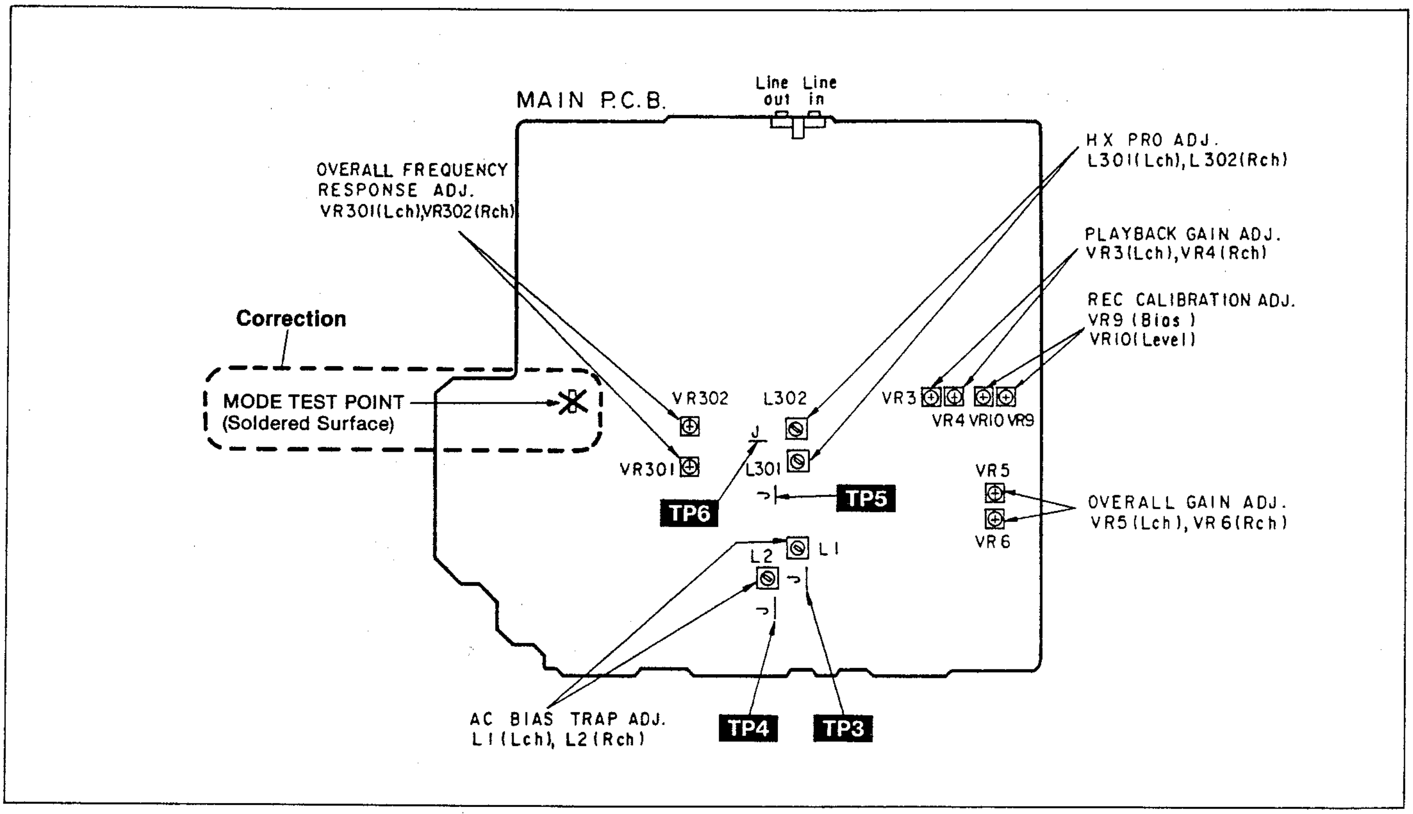
Notes:
- Mentioned in this parts list is only those different from Model No. RS-BX707 (EG). All other parts are the same as for RS-BX707 (EG).
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	RS-BX707 (EG)	**RS-BX808 (EB, EG)**		
RESISTORS				
R201	ERJ6GEYJ333V	**ERJ6GEYJ273V**	C.RESISTOR, 1/10W, 27KΩ	
R305	ERDS2TJ682T	—	C.RESISTOR, 1/4W, 6.8KΩ	Deletion
CAPACITORS				
C3, 4	ECEA0JK101	**ECEA1AU101**	E.CAPACITOR, 10V, 100μF	
C327, 328	ECEA1EK100	**ECEA1VKA100B**	E.CAPACITOR, 35V, 10μF	
C512	—	**ECEA0JKA470B**	E.CAPACITOR, 6.3V, 47μF	Addition
C907	ECEA0JK101	**ECEA1AU101**	E.CAPACITOR, 10V, 100μF	
C912	ECEA0JK101	**ECEA1AU101**	E.CAPACITOR, 10V, 100μF	
VARIABLE RESISTOR(S)				
VR303	—	**EVNDXAA00B14**	ERASE CURRENT ADJ.	Addition
OSCILLATOR(S)				
CF201	RSXA3M74S01	**RSXA3M75S01**	CRYSTAL OSCILLATOR	
CONNECTOR(S)				
CN2PA, 2PB	RJS1A1703	**RJS1A6603**	CONNECTOR (3P)	
CN60A, 60B	RJS1A1705	**RJS1A6605**	CONNECTOR (5P)	
CP1	RJP3G18ZA	**SJTD313**	CONNECTOR (3P)	
CP16	RJT057W004	**RJT057W004-1**	CONNECTOR (4P)	
CP110	RJT057W004	**RJT057W004-1**	CONNECTOR (4P)	
CABINET AND CHASSIS				
2	RYF0146A-K	**RYF0161A-K**	CASSETTE LID	
5	XTBS3+8JFZ1		SCREW	**Change of Pcs**
7	RGR0128A-E1	**RGR0128B-I1**	REAR PANEL	(EG)
		RGR0128B-J1		(EB)
14	RKU0009-2	**RKU0039**	BOTTOM BOARD	
15	RFKGSBX707EB	**RFKGSBX808EB**	FRONT PANEL ASS'Y	
18	RMC0139	**RMC0139-1**	SHIELD PLATE, P.TRANSFORMER	
56	XTB3+8JFZ		SCREW	**Change of Pcs**
PACKING MATERIAL				
P1	RPG0994	**RPG1093**	CARTON BOX	
P3	SPSD152	**RPQ0164**	ACCESSORIES PAD	
P4	SPP756	**XZB50X65A02Z**	PROTECTION COVER (UNIT)	
P5	—	**SPB1061**	PROTECTION BAG (F.B.)	Addition
P6	—	**XZB24X34C04**	PROTECTION BAG (F.B., ACC.)	Addition
ACCESSORIES				
A1	RFKSSBX707EG	**RFKSSBX808EG**	INSTRUCTION MANUAL ASS'Y	(EG)
		RQT1311-B	INSTRUCTION MANUAL	(EB)
A4	SFDAC05E03	**RJA0019-1K**	AC POWER SUPPLY CORD	(EG) ⚠
		SJA193		(EB) ⚠
A5	SJP2249-3	**SJP2276**	STEREO CONNECTION CABLE	

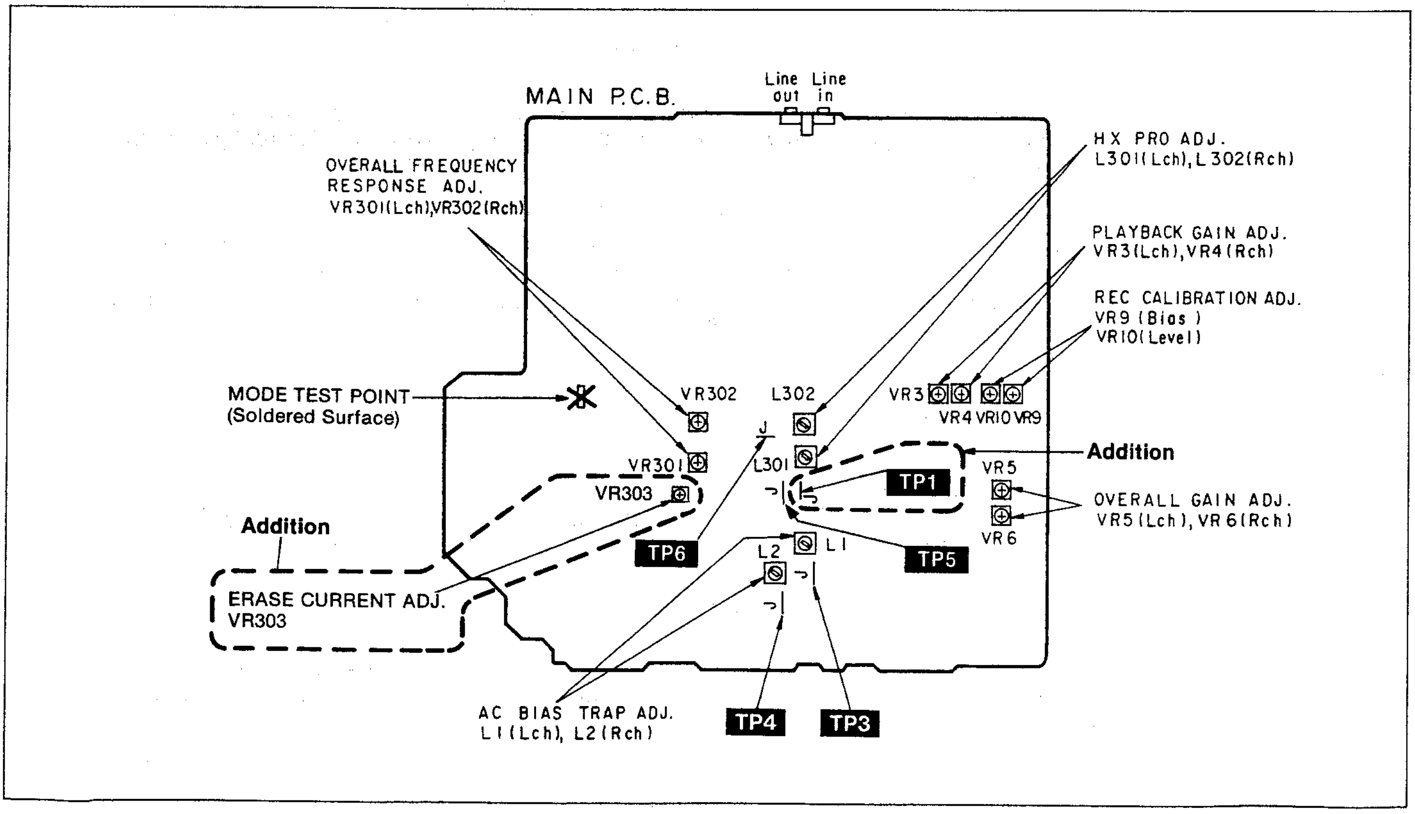
■ MEASUREMENT AND ADJUSTMENT METHODS (on page 11.)

- **Adjustment Points**

RS-BX707 (EB, EG)


MAIN P.C.B.
Line out
Line in
OVERALL FREQUENCY RESPONSE ADJ.
VR301(Lch),VR302(Rch)
HX PRO ADJ.
L301(Lch),L302(Rch)
PLAYBACK GAIN ADJ.
VR3(Lch),VR4(Rch)
REC CALIBRATION ADJ.
VR9 (Bias)
VR10(Level)
Correction
MODE TEST POINT
(Soldered Surface)
VR302
L302
VR3
VR4
VR10
VR9
VR301
J
L301
TP6
TP5
VR5
VR6
OVERALL GAIN ADJ.
VR5(Lch), VR6(Rch)
L2
L1
AC BIAS TRAP ADJ.
L1(Lch), L2(Rch)
TP4
TP3

RS-BX808 (EB, EG)


MAIN P.C.B.
Line out
Line in
OVERALL FREQUENCY RESPONSE ADJ.
VR301(Lch),VR302(Rch)
HX PRO ADJ.
L301(Lch),L302(Rch)
PLAYBACK GAIN ADJ.
VR3(Lch),VR4(Rch)
REC CALIBRATION ADJ.
VR9 (Bias)
VR10(Level)
MODE TEST POINT
(Soldered Surface)
VR302
L302
VR3
VR4
VR10
VR9
Addition
VR301
J
L301
TP1
VR5
VR303
VR6
OVERALL GAIN ADJ.
VR5(Lch), VR6(Rch)
Addition
TP6
TP5
ERASE CURRENT ADJ.
VR303
L2
L1
AC BIAS TRAP ADJ.
L1(Lch), L2(Rch)
TP4
TP3

※ **Before the "HEAD AZIMUTH ADJUSTMENT" procedure, adjust the following contents.**

■ Replacing, Installing and Adjusting the Head

Adjustment Screws and Head Screws

1. Remove the head by removing the two head screws (see Fig. A).
2. Install the head with the two head screws, holding the head facing in the direction of arrow ① (toward the left) (see Fig. A).
3. Install the head alignment gauge (QZZ0207) in the mechanism and set the unit to the play mode.
4. With the check bar, check if it comes in contact with the head. (See Figs. B and C)

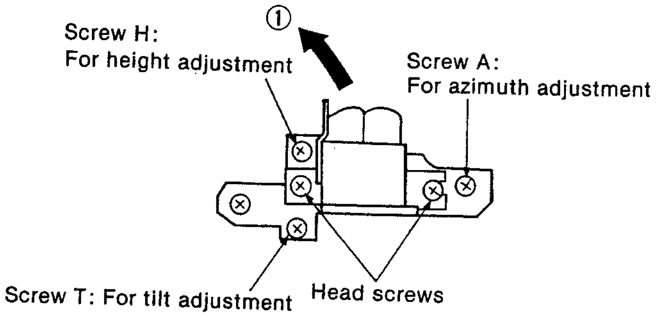

①
Screw H:
For height adjustment
Screw A:
For azimuth adjustment
Screw T: For tilt adjustment
Head screws

Fig. A

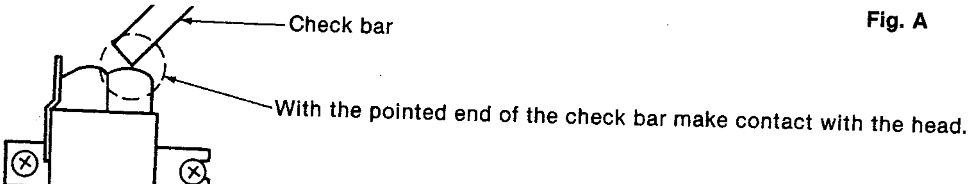

Check bar
With the pointed end of the check bar make contact with the head.
Head

Fig. B

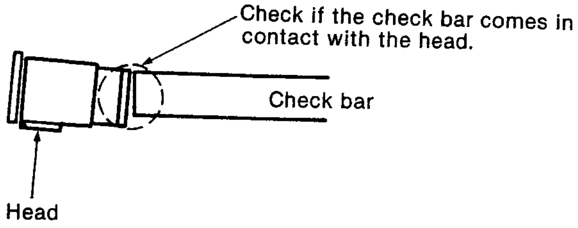

Check if the check bar comes in contact with the head.
Check bar
Head

Fig. C

* If the check bar and head do not come in contact, adjust the head with the "Tilt Adjustment Screw".

5. With the check bar, make sure that the check bar and tape guide do not come in contact, and visually check that the head is placed horizontally (azimuth aligned).

* If the check bar comes in contact with the tape guide, make adjustments as follows. (See Fig. D)

[If the check bar comes in contact with the top of the tape guide:]

Turn screw H (height adjustment screw) clockwise (as shown in Fig. A)until the check bar does not come in contact with the tape guide. Then turn screw T (tilt adjustment screw) in the same way as screw H was turned. Finally, turn screw A (azimuth alignment screw) counterclockwise as many degrees as screws H and T were turned.

[If the check bar comes in contact with the bottom of the tape guide:]

Turn screw H (height adjustment screw) counterclockwise until the check bar does not come in contact with the tape guide. Then turn screw T (tilt adjustment screw) in the same way as screw H was turned. Finally, turn screw A (azimuth alignment screw) clockwise as many degrees as screws H and T were turned.

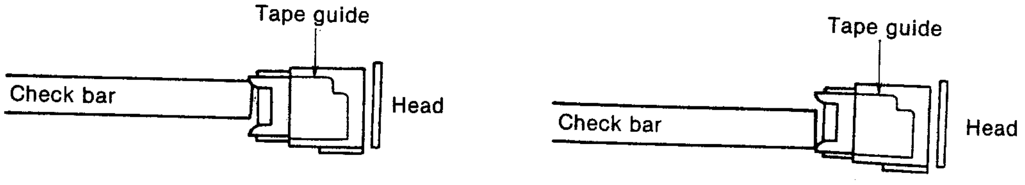

Tape guide
Check bar
Head
Tape guide
Check bar
Head

Fig. D

6. With the check bar, make sure that the check bar does not come in contact with the tape guide on pinch arm S. If it does, make adjustment with a hex wrench (1.27mm) until the check bar does not come in contact with the pinch arm.

Addition

Addition

7. Then, with the check bar, make sure that the check bar does not come in contact with the tape guide. If it does, turn the screw as shown in Fig. E until the check bar does not come in contact with the tape guide.
8. After making these adjustments, insert a tape with the mirror (QZZCRD) and play back the tape. Check if the tape runs smoothly (i.e. does not get twisted).
9. Follow "Head Azimuth Adjustment" procedures.
10. After following the adjustment procedures, repeat steps 3 to 10 and check if trouble occurs (if it does, remedy it).

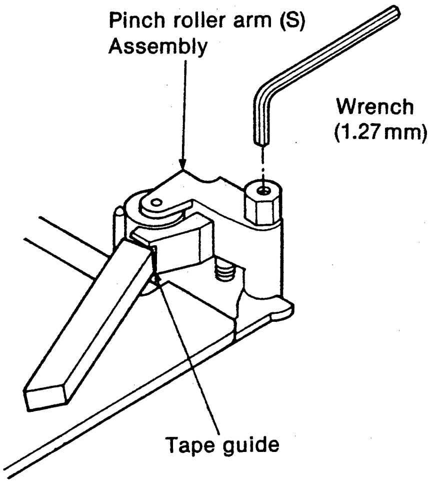

Pinch roller arm (S)
Assembly
Wrench
(1.27mm)
Tape guide

Fig. E

■ Adjustment procedures when replacing "Pinch Arm S"

1. Install the head alignment gauge and set the play mode.
2. Adjust the height of the pinch arm with the check bar, using the height of tape guide on the head as reference.

■ If the already adjusted "Screw H (Height Adjustment Screw) and Screw T (Tilt Adjustment Screw)" are wrongly turned

- Install the head alignment gauge (QZZ0207), set the play mode, and turn screws H and T until the check bar does not come in contact with the tape guide on the head.
- Then, follows steps 1 to 10 in "Replacing, Installing and Adjusting the Head".

HEAD AZIMUTH ADJUSTMENT (on page 12.)

RS-BX707 (EB, EG)

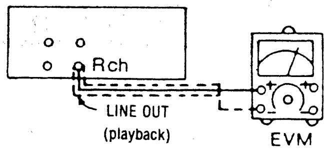

Rch
LINE OUT
(playback)
EVM

Fig.1

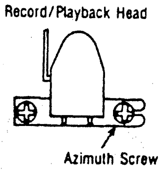

Record/Playback Head
Azimuth Screw

Fig.2

RS-BX808 (EB, EG)

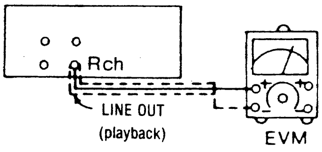

Rch
LINE OUT
(playback)
EVM

Fig.1

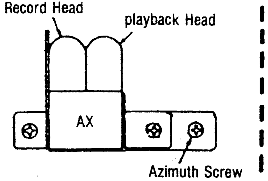

Record Head
playback Head
AX
Azimuth Screw

Fig.2

Change

Addition

ERASE CURRENT ADJUSTMENT

1. Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record Pause mode.
2. Adjust **VR303** so that the output between **TP1** and GND is within the standard value.

Standard value: 190±5mA (Metal)...EVM Reading: 190±5mV

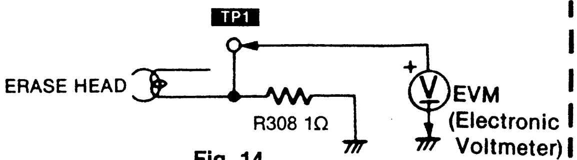
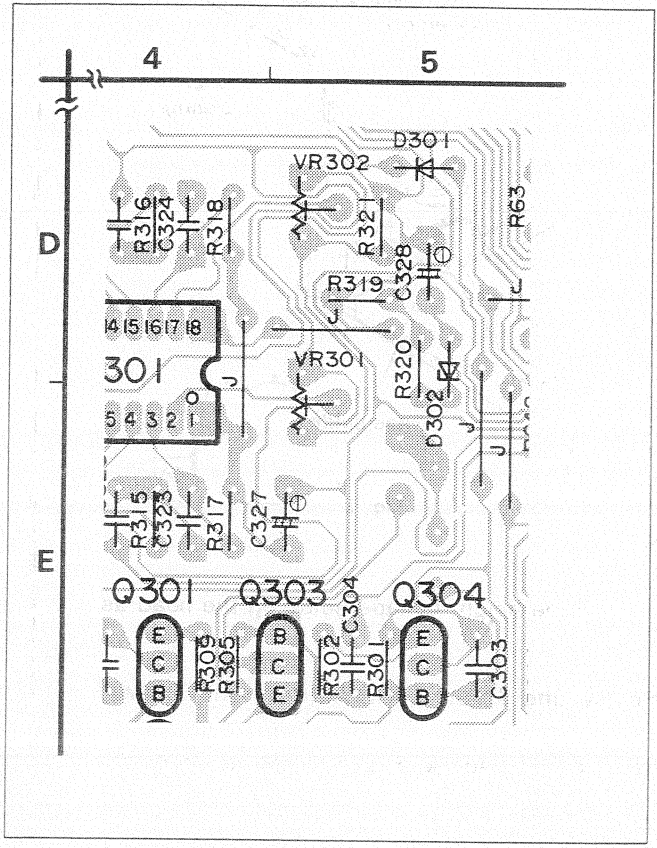

TP1
ERASE HEAD
R308 1Ω
EVM
(Electronic
Voltmeter)

Fig. 14

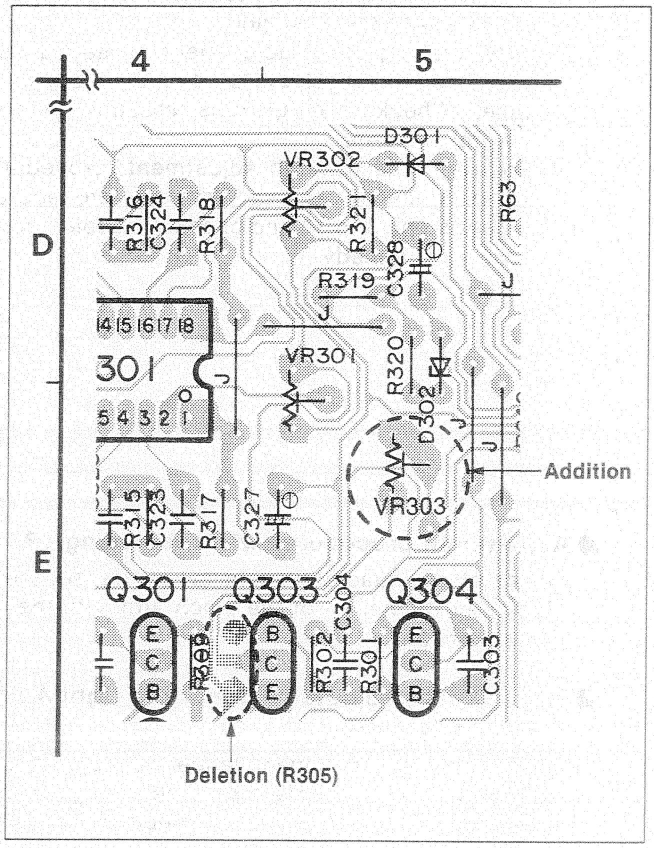
PRINTED CIRCUIT BOARDS (on pages 15, 16.)

A MAIN P.C.B.

RS-BX707 (EB, EG)


4
5
D
E
D301
VR302
R316
C324
R318
R321
R63
C328
R319
J
14 15 16 17 18
301
5 4 3 2 1
VR301
R320
D302
R315
C323
R317
C327
Q301
Q303
Q304
C304
E C B
B C E
R309
R305
R302
R301
C303

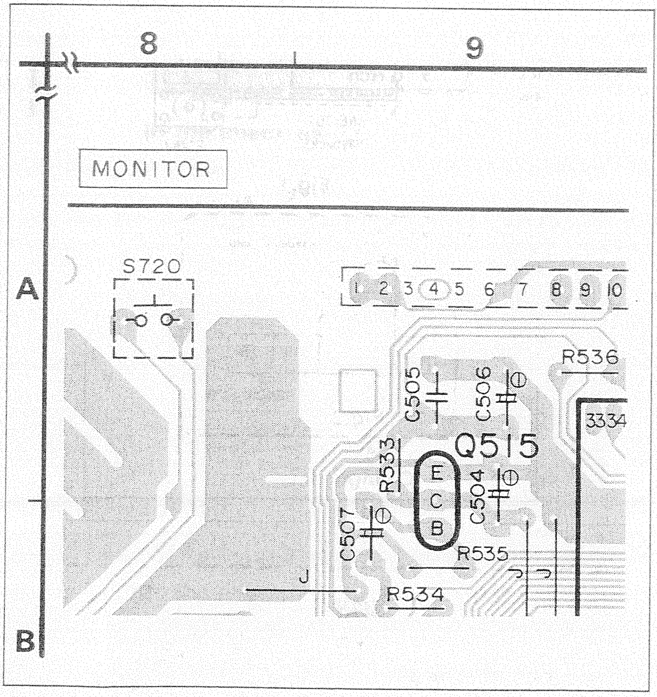
RS-BX808 (EB, EG)

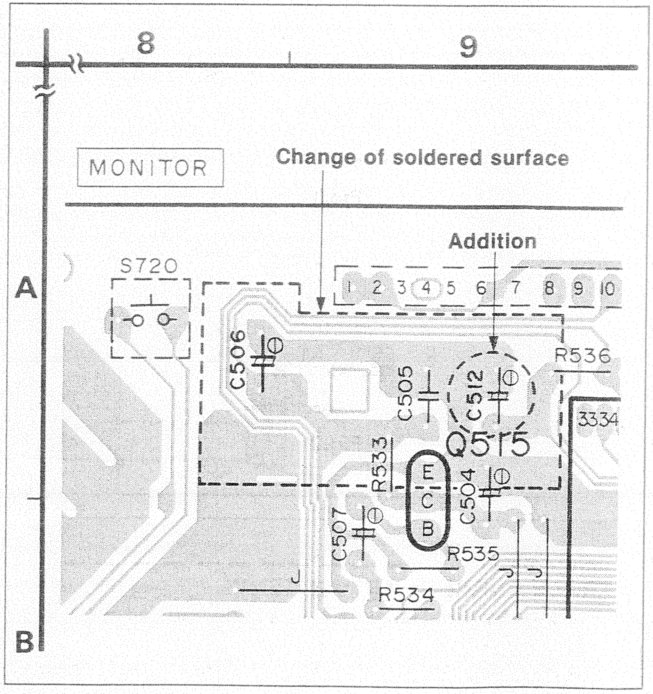

4
5
D
E
D301
VR302
R316
C324
R318
R321
R63
C328
R319
J
14 15 16 17 18
301
5 4 3 2 1
VR301
R320
D302
VR303
R315
C323
R317
C327
Q301
Q303
Q304
C304
E C B
B C E
R309
R302
R301
C303

Addition

Deletion (R305)

D FL DRIVE P.C.B.


8
9
A
B
MONITOR
S720
1 2 3 4 5 6 7 8 9 10
R536
C505
C506
3334
Q515
R533
E C B
C504
C507
R535
J
R534


8
9
A
B
MONITOR
S720
1 2 3 4 5 6 7 8 9 10
C506
C505
C512
R536
3334
Q515
R533
E C B
C504
C507
R535
J
R534

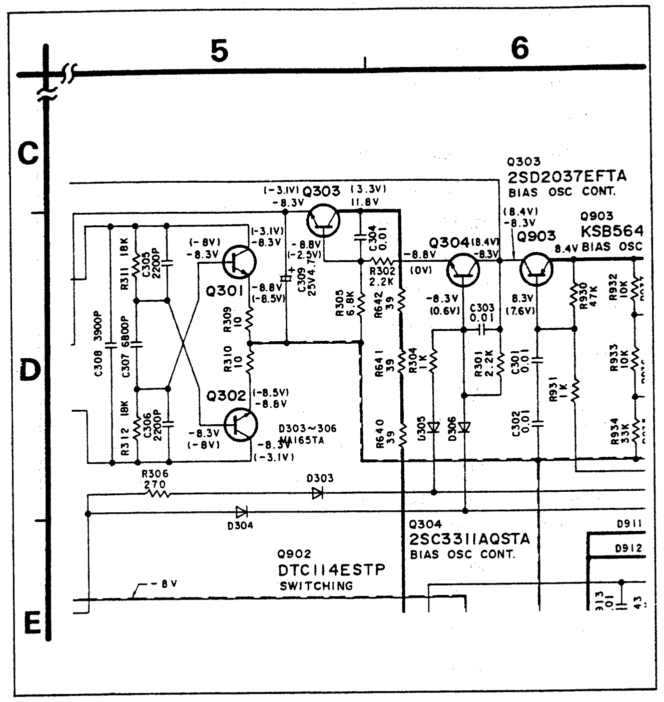
Change of soldered surface

Addition

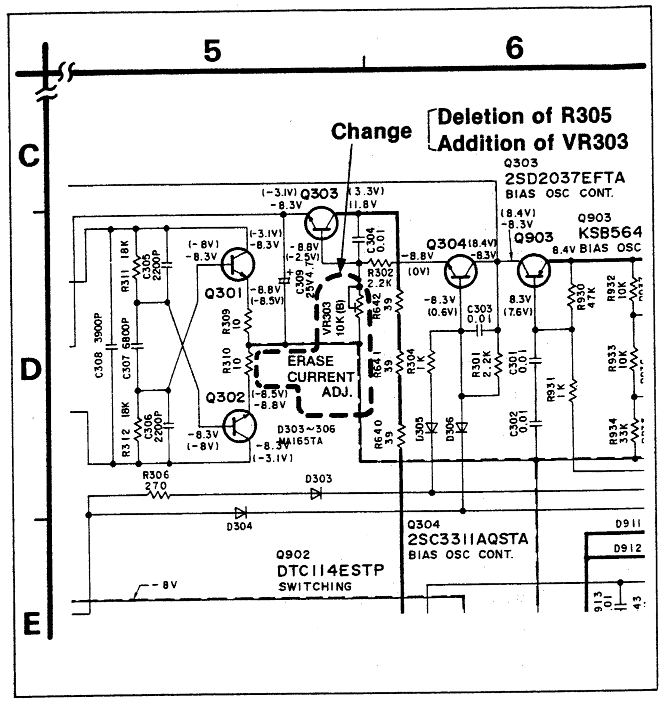
SCHEMATIC DIAGRAM (on pages 20, 23.)

A MAIN CIRCUIT

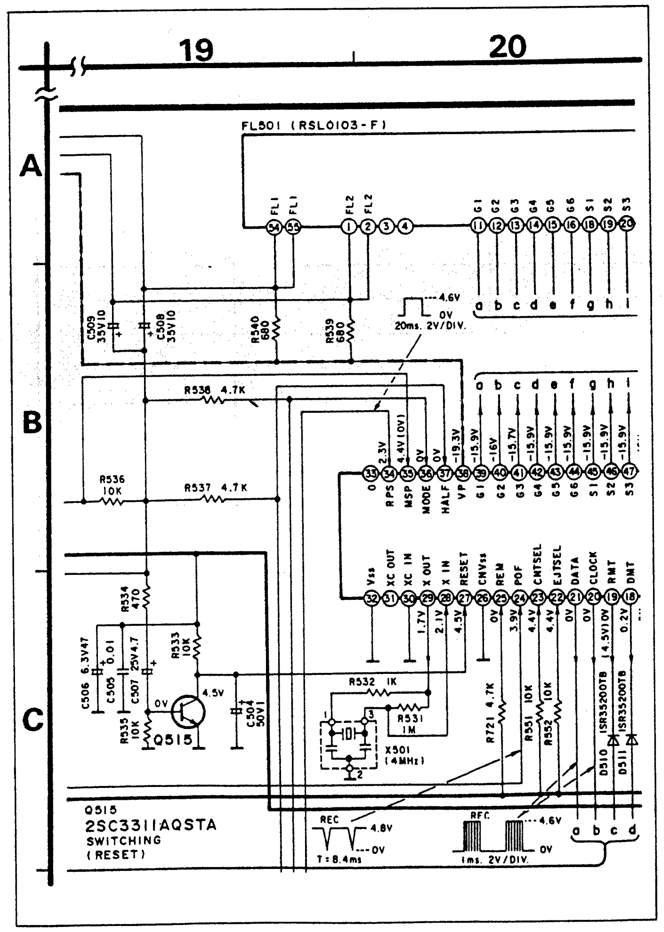
RS-BX707 (EB, EG)

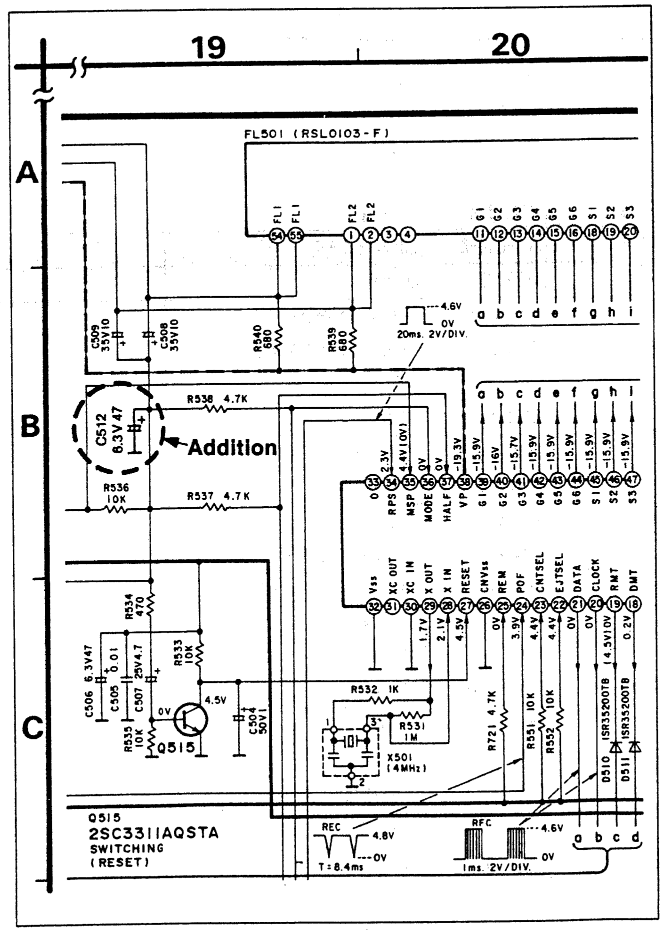

5
6
C
D
E
Q303
2SD2037EFTA
BIAS OSC CONT.
Q903
KSB564
BIAS OSC
Q301
Q302
Q304
R305
R306
D303~306
MA165TA
Q304
2SC3311AQSTA
BIAS OSC CONT.
Q902
DTC114ESTP
SWITCHING

RS-BX808 (EB, EG)


5
6
C
D
E
Change
Deletion of R305
Addition of VR303
Q303
2SD2037EFTA
BIAS OSC CONT.
Q903
KSB564
BIAS OSC
Q301
Q302
Q304
VR303
10K (B)
ERASE
CURRENT
ADJ.
D303~306
MA165TA
Q304
2SC3311AQSTA
BIAS OSC CONT.
Q902
DTC114ESTP
SWITCHING

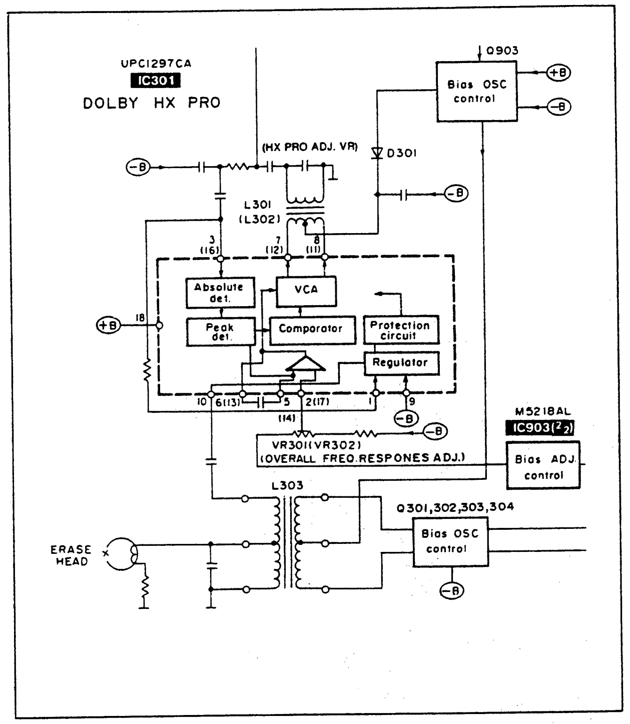
D FL DRIVE CIRCUIT


19
20
A
B
C
FL501 (RSL0103-F)
R538 4.7K
R536 10K
R537 4.7K
R532 1K
R531 1M
X501 (4MHz)
Q515
2SC3311AQSTA
SWITCHING
(RESET)
REC
RFC

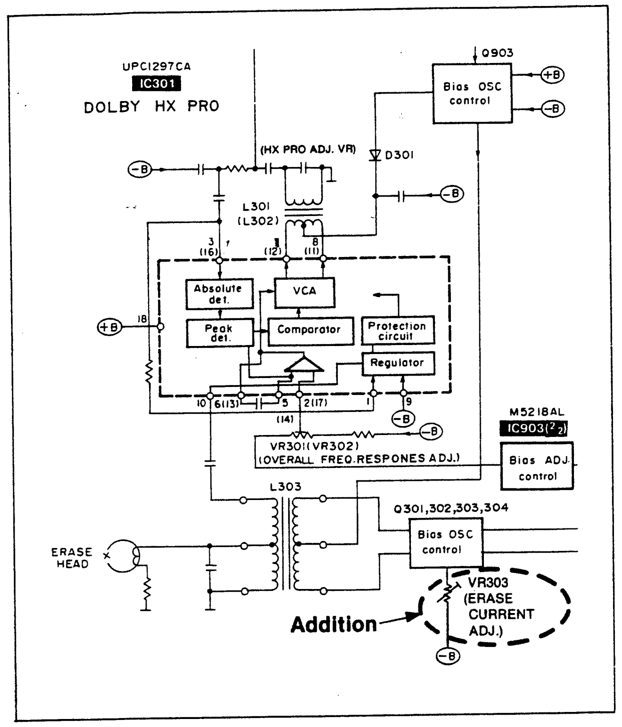

19
20
A
B
C
FL501 (RSL0103-F)
C512
6.3V 47
Addition
R538 4.7K
R536 10K
R537 4.7K
R532 1K
R531 1M
X501 (4MHz)
Q515
2SC3311AQSTA
SWITCHING
(RESET)
REC
RFC

BLOCK DIAGRAM (on page 27.)

RS-BX707 (EB, EG)

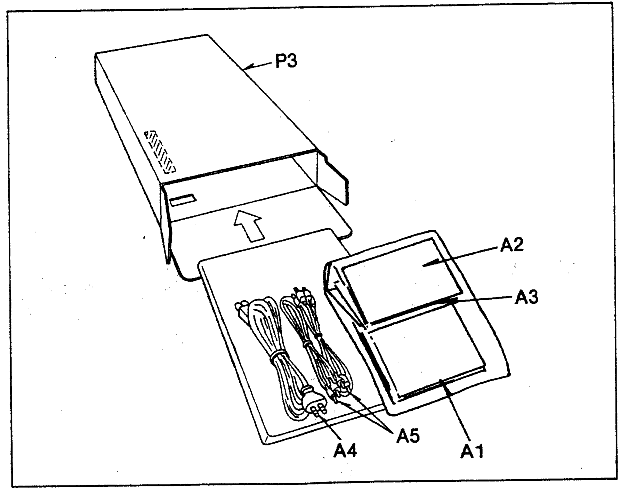

UPC1297CA
IC301
DOLBY HX PRO
Q903
Bias OSC control
(HX PRO ADJ. VR)
D301
L301 (L302)
Absolute det.
VCA
Peak det.
Comparator
Protection circuit
Regulator
VR301 (VR302)
(OVERALL FREQ.RESPONES ADJ.)
M5218AL
IC903(1/2)
Bias ADJ control
L303
Q301,302,303,304
Bias OSC control
ERASE HEAD

RS-BX808 (EB, EG)

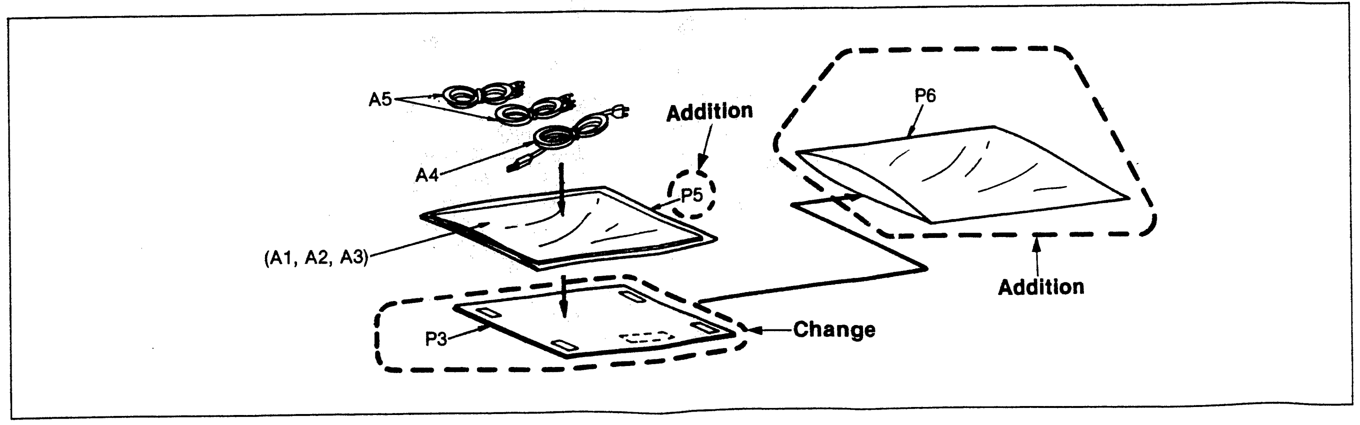

UPC1297CA
IC301
DOLBY HX PRO
Q903
Bias OSC control
(HX PRO ADJ. VR)
D301
L301 (L302)
Absolute det.
VCA
Peak det.
Comparator
Protection circuit
Regulator
VR301 (VR302)
(OVERALL FREQ.RESPONES ADJ.)
M5218AL
IC903(1/2)
Bias ADJ control
L303
Q301,302,303,304
Bias OSC control
ERASE HEAD
VR303
(ERASE CURRENT ADJ.)
Addition

PACKING (on page 30.)

RS-BX707 (EB, EG)


P3
A2
A3
A4
A5
A1

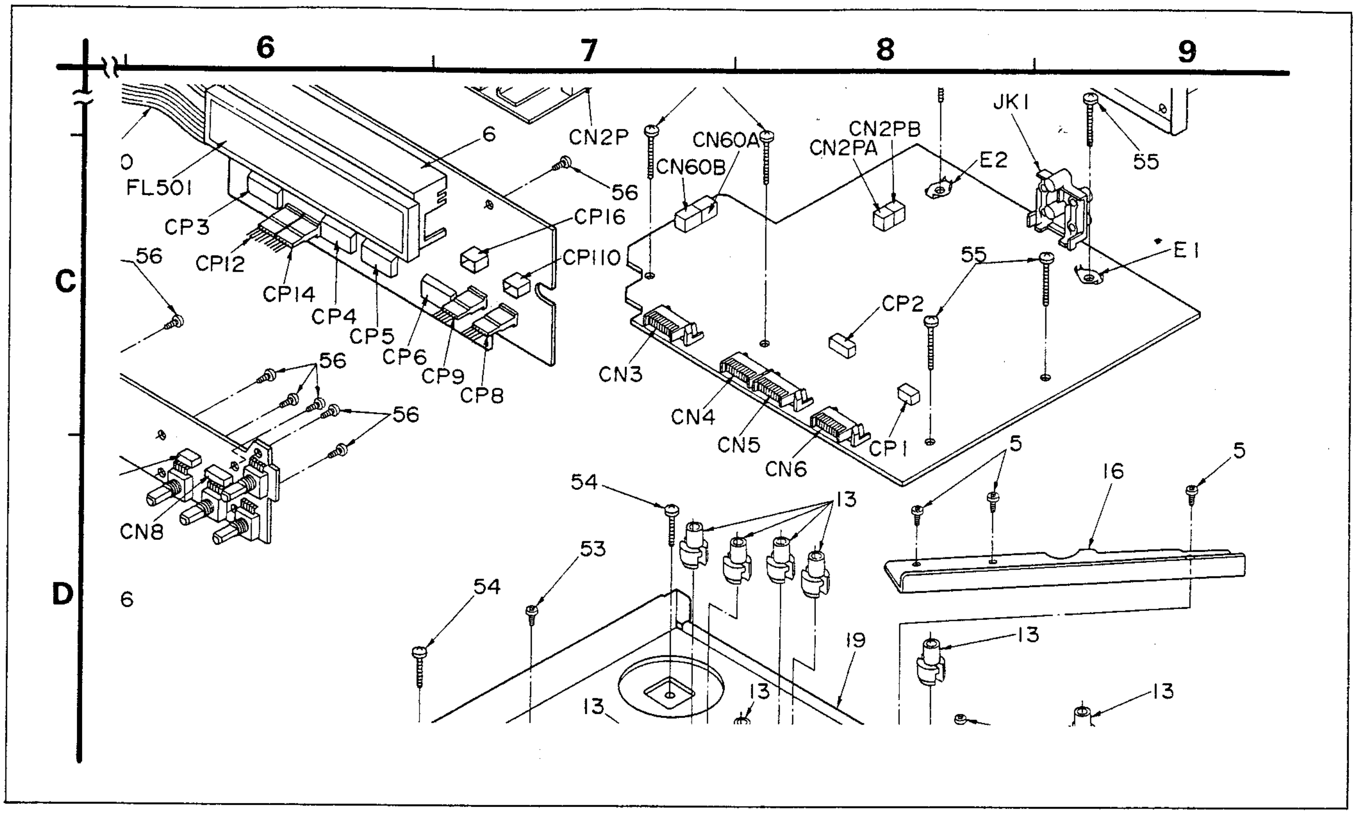
RS-BX808 (EB, EG)


A5
A4
Addition
P5
(A1, A2, A3)
P3
Change
P6
Addition

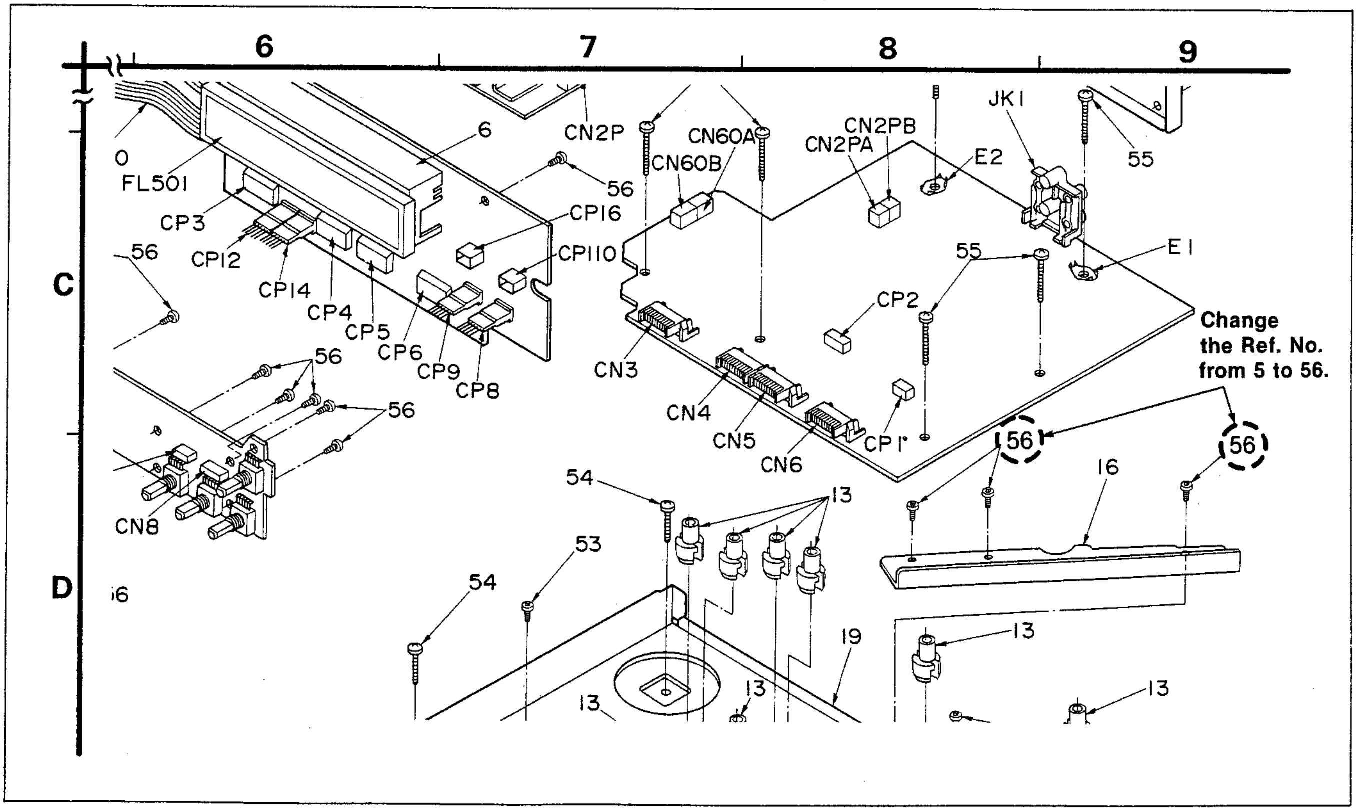
EXPLODED VIEWS (on page 34.)

- **Cabinet parts**

RS-BX707 (EB, EG)


6
7
8
9
C
D
FL501
CP3
CP12
CP14
CP4
CP5
CP6
CP9
CP8
CP16
CP110
CN2P
CN60A
CN60B
CN2PA
CN2PB
E2
JK1
55
E1
CP2
CN3
CN4
CN5
CN6
CP1
CN8
56
54
53
13
19
16
5

RS-BX808 (EB, EG)

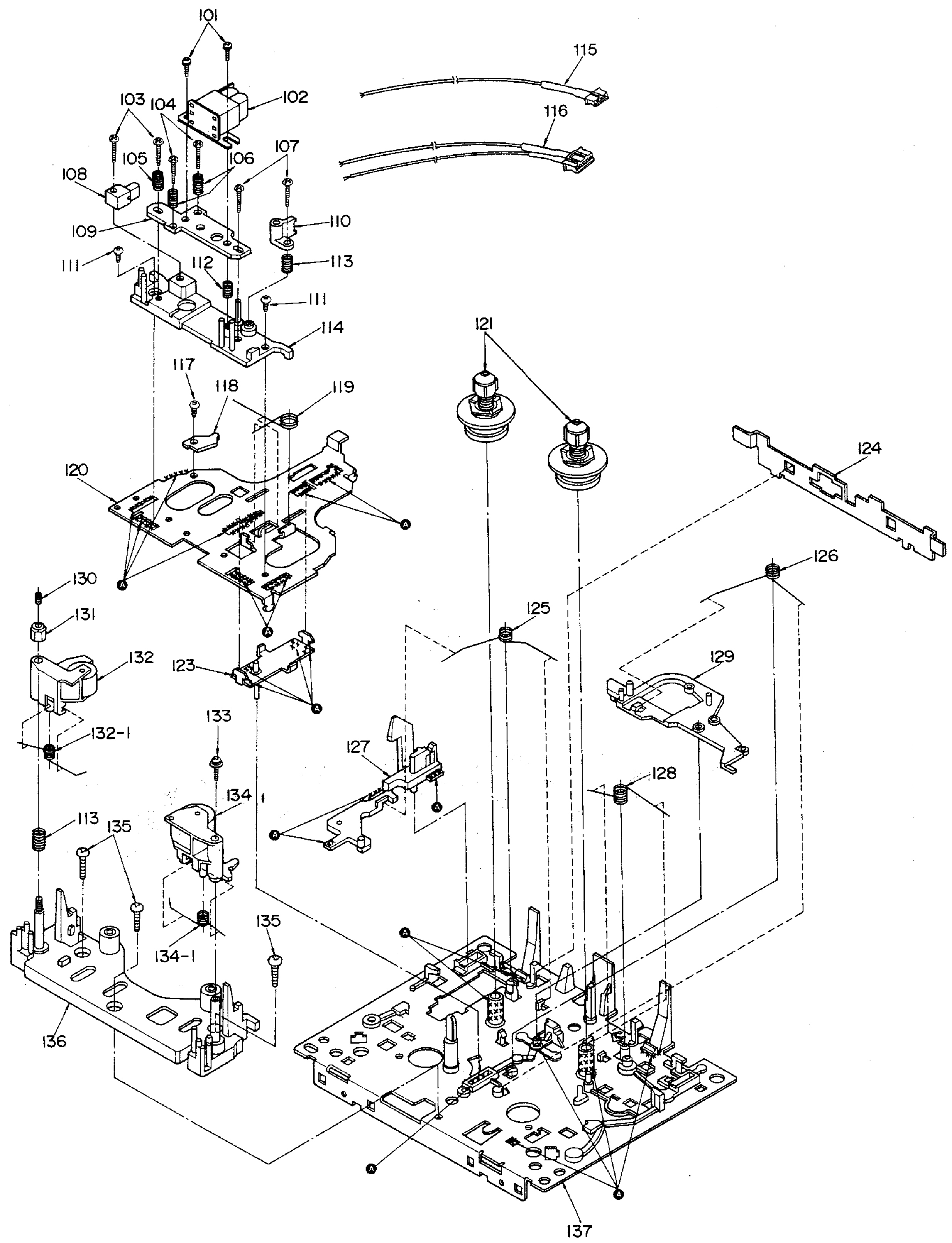

6
7
8
9
C
D
FL501
CP3
CP12
CP14
CP4
CP5
CP6
CP9
CP8
CP16
CP110
CN2P
CN60A
CN60B
CN2PA
CN2PB
E2
JK1
55
E1
CP2
CN3
CN4
CN5
CN6
CP1
CN8
56
54
53
13
19
16

Change the Ref. No. from 5 to 56.

■ EXPLODED VIEWS

• Mechanical parts

(Top view)


101
102
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121
123
124
125
126
127
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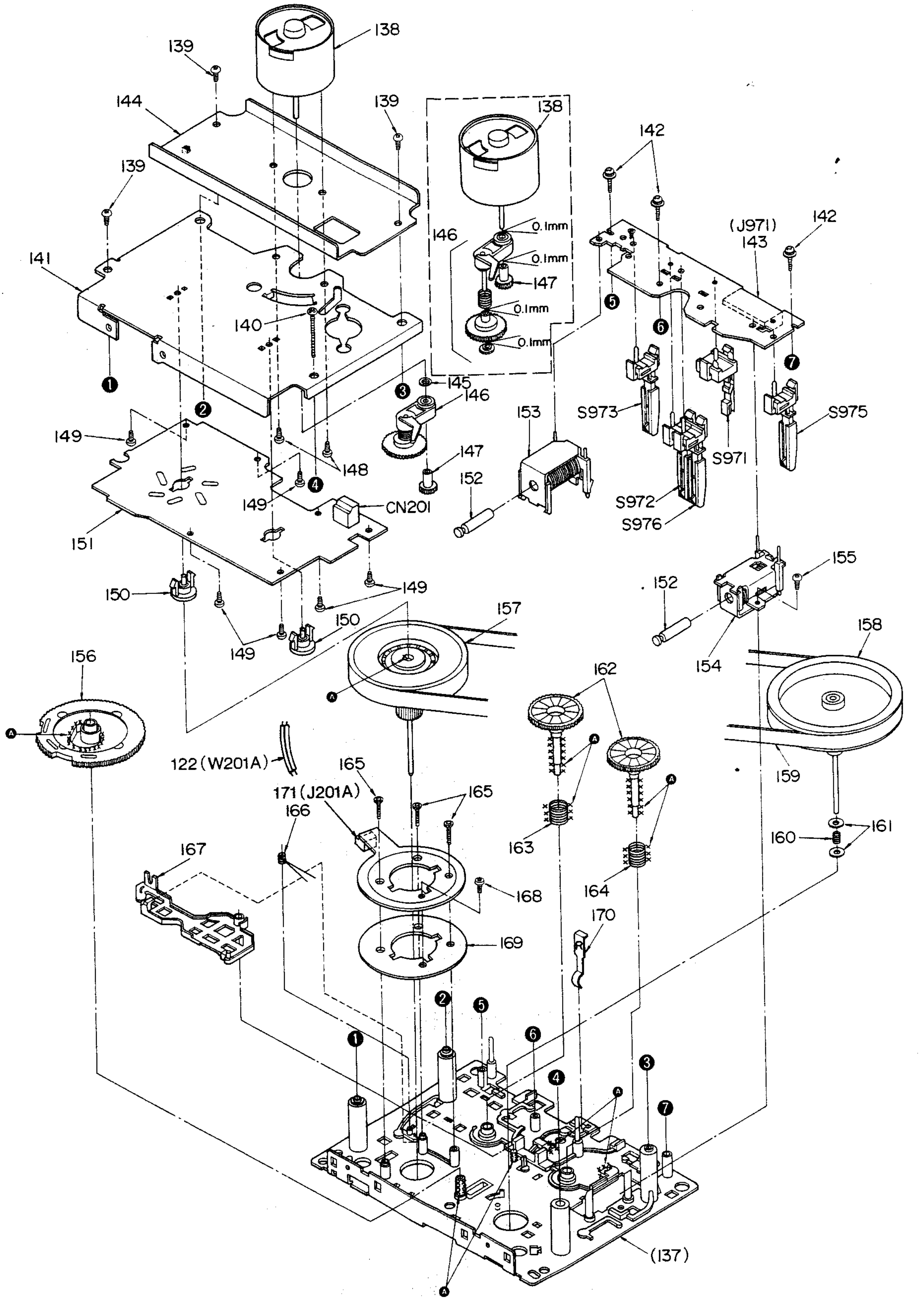
130
131
132
132-1
133
134
134-1
135
136
137
Ⓐ

(Bottom view)


138
139
140
141
142
(J971)
143
144
145
146
147
0.1mm
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171 (J201A)
122 (W201A)
CN201
S971
S972
S973
S975
S976
(137)
❶
❷
❸
❹
❺
❻
❼
Ⓐ

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Remarks
		MECHANISM PARTS LIST	
101	XYN2+C4	SCREW	
102	RBR4CY009-C	R/P HEAD	
103	XSN2+10	SCREW	
104	RHD20005	SCREW	
105	RMB0135	SPRING	
106	RMB0137	SPRING	
107	XSN2+8	SCREW	
108	RBR2CY008-A	E HEAD	
109	RMA0271	HEAD PLATE	
110	RMR0249	TAPE GUIDE	
111	XTN2+5F	SCREW	
112	RMB0136	SPRING	
113	RMB0133	SPRING	
114	RXQ0099	HEAD SPACER	
115	REX0093-2	LEAD WIRE BLOCK(3P)	
116	REX0409	LEAD WIRE BLOCK(4P)	
117	XTN2+4F	SCREW	
118	RMR0250	F PEACE	
119	RME0066	SPRING	
120	RMA0047A-1	HEAD BASE	
121	RXR0009	REEL TABLE	
122	RWJ0202090XX	FLAT CABLE(2P), W201A	
123	RXQ0078	MAIN ROD ASS'Y	
124	RML0069-1	LEVER	
125	RME0018-1	SPRING	
126	RME0059	SPRING	
127	RMM0012-2	EJECT ROD(L)	
128	RUW142ZA	SPRING	
129	RML0040-2	BRAKE LEVER	
130	XXE26D3	SCREW	
131	RHN26002	NUT, ADJUSTMENT	
132	RXP0026	PINCH ROLLER ARM(S)	
132-1	RMB0134	SPRING	
133	XSN2+W4FZ	SCREW	
134	RXP0004	PINCH ROLLER ARM(F)	
134-1	RUW140ZC	SPRING	
135	XTN26+6F	SCREW	
136	RXQ0098	HOUSING BLOCK UNIT	
137	RMK0097	CHASSIS BLOCK UNIT	
138	MMN-6F4RA88	REEL MOTOR	
139	XTN26+7J	SCREW	
140	XTN26+26F	SCREW	
141	RMA0048A	FLYWHEEL PLATE	
142	XTW2+8S	SCREW	
143	RJS11T7ZA	CONNECTOR(11P), J971	
144	RMA0324	BRACKET	
145	RHW21013	WASHER	
146	RXG0009	GEAR ASS'Y	
147	RDG0034	REEL MOTOR GEAR	
148	XSN26+4	SCREW	
149	XTN2+3F	SCREW	
150	RMR0141	THRUST BEARING	
151	REP0268B	STATER P.C.B.ASS'Y	
152	RUB428ZE	MOVING IRON CORE	
153	RSJ0003	SOLENOID	
154	RXQ0011	BRAKE SOLENOID	
155	XTN26+4F	SCREW	
156	RDG0030	MAIN GEAR	
157	RXF0018	FLYWHEEL(D)	
158	RXF0013	FLYWHEEL(S)	
159	RDV0012	BELT	
160	RMB0138	SPRING	
161	RHW21011	WASHER	
162	RXG0003	REEL TABLE GEAR	
163	RUQ112ZA	SPRING	
164	RUQ111ZB	SPRING	
165	RHE5204ZB	SCREW	
166	RUW147ZA	SPRING	
167	RML0037	LEVER	
168	XQN2+AF3	SCREW	
169	RMQ0037	FG YOKE	
170	RUS609ZC	TAPE PRESSURE SPRING	
171	RJS2T7ZA	CONNECTOR(2P), J201A	

Printed in Japan
H911107800 SN/HH/TN

SERV. 7211

ORDER NO. AD9106170C2

Service Manual

Cassette Deck

RS-BX707

Dolby NR-Equipped
Stereo Cassette Deck

* DOLBY B·C NR HX PRO

Color

(K)... Black Type

Area

Country Code	Area	Color
(EB)	Great Britain.	(K)
(EG)	F.R. Germany and Italy./Continental Europe.	

* HX Pro headroom extension originated by Bang Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY", the double-D symbol, and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

RS-TR555 MECHANISM SERIES (AR350)

SPECIFICATIONS

■ CASSETTE DECK SECTION

Deck system	Stereo cassette deck
Track system	4-track, 2-channel
Recording system	AC bias
Bias frequency	80 kHz
Erasing system	AC erase
Heads	
	Recording head [Permalloy (Combination)]×1
	Playback head [Permalloy (Combination)]×1
	Erasing head (Double-gap ferrite)×1
Motors	
	Capstan drive (Quartz DD motor)×1
	Reel table drive (DC motor)×1
	Cassette holder open/close (DC motor)×1
Tape speed	4.8 cm/sec. (1⅞ ips)
Wow and flutter	0.05% (WRMS)
	±0.14% (DIN)
Fast forward and rewind time	
	Approx. 100 seconds with C-60 cassette tape
Frequency response (Dolby NR off)	
NORMAL	30 Hz~17 kHz, ±3 dB
	20 Hz~18 kHz (DIN)
CrO$_2$	30 Hz~18 kHz, ±3 dB
	20 Hz~19 kHz (DIN)
METAL	30 Hz~19 kHz, ±3 dB
	20 Hz~20 kHz (DIN)
S/N (signal level=max recording level, CrO$_2$ type tape)	
NR off	57 dB (A weighted)
Dolby B NR on	66 dB (CCIR)
Dolby C NR on	74 dB (CCIR)
Input sensitivity and impedance	
LINE IN	60 mV/47 kΩ
Output voltage and impedance	
LINE OUT	400 mV/800Ω
HEADPHONES	125 mV/8Ω
	(Load impedance 8Ω~600Ω)

■ GENERAL

Power consumption	20 W
Power supply	AC 50 Hz/60 Hz, 230 V–240 V
Dimensions (W×H×D)	430×135×300 mm
	($16\frac{15}{16}$"×$5\frac{5}{16}$"×$11\frac{13}{16}$")
Weight	5.0 kg (11 lb.)

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.

Technics

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ACCESSORIES 2
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REPLACEMENT PARTS LIST .... 37~40
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※ TECHNICAL INFORMATION

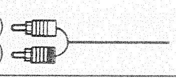
This technical information is located on pp 45-51 of the RS-B555 Service Manual (Order No. AD8907231C5). Therefore, refer to that Service Manual.
There is a few diferences in this schematic diagram.
But this is the same as RS-B555 basically.

CONNECTIONS

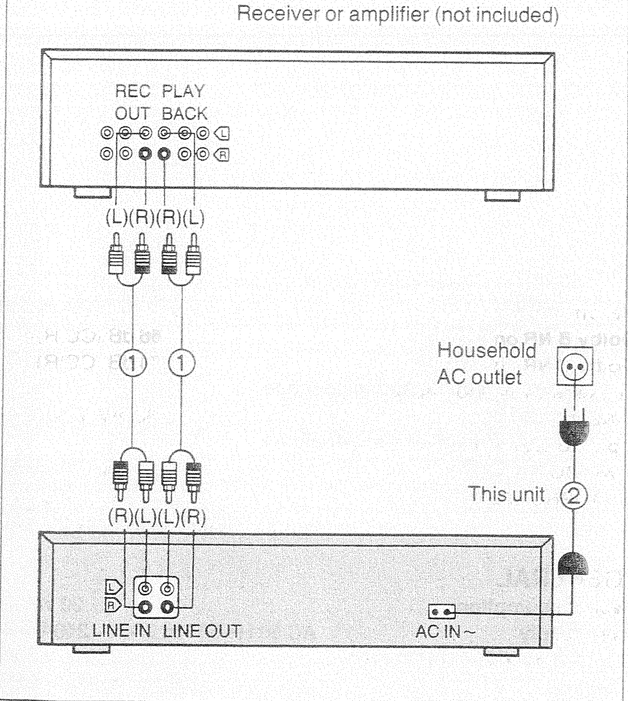
Make connections in the numbered sequence by using the included cables.

① Connect the stereo connection cables.

Stereo connection cable White (L) Red (R)



② Connect the AC power supply cord.



AC power supply cord (②)

The configuration of the AC outlet and AC power supply cord differs according to area.

Placement hints
If this unit is placed near a receiver or a tuner, a "hum" noise may be heard during tape playback, recording, or AM reception of the receiver or the tuner.
If this occurs, leave as much space as possible between the units, or place them where is the least amount of "hum".

Note:
This unit is a precision instrument. Be sure to place it on a flat surface.

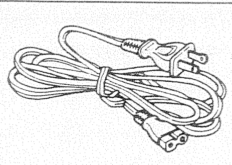
For (EB) area

Cut off and dispose of the plug and replace with a suitable plug.

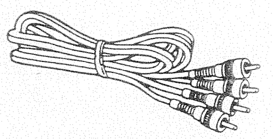
Household AC outlet

Fit a suitable plug to the AC power supply cord.

ACCESSORIES



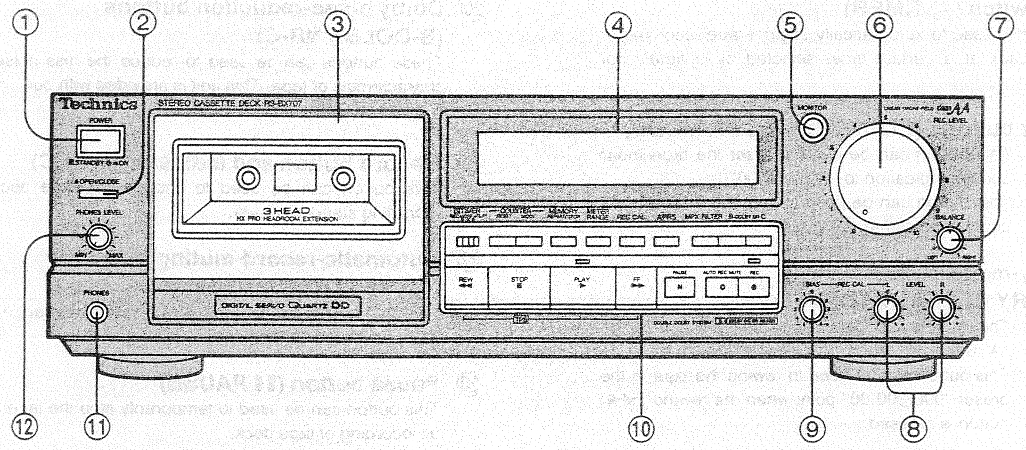
AC power supply cord
(SFDAC05E03) ..... (EG)
(SJA193) .... (EB) .... 1 pc.



Stereo connection cables
(SJP2249-3) .... 2 pcs.

Note: Configuration of AC power supply cord differs according to area.

LOCATION OF CONTROLS


①
②
③
④
⑤
⑥
⑦
Technics
STEREO CASSETTE DECK RS-BX707
POWER
STANDBY ON
OPEN/CLOSE
PHONES LEVEL
MIN
MAX
PHONES
3 HEAD
HX PRO HEADROOM EXTENSION
DIGITAL SERVO QUARTZ DD
MONITOR
REC LEVEL
BALANCE
BIAS
REC CAL
LEVEL
⑫
⑪
⑩
⑨
⑧

Control section I

① Power "STANDBY ⏻/ON" switch (POWER ■ STANDBY ⏻ ▬ ON)
This switch switches ON and OFF the secondary circuit power only. The unit is in the "standby" condition when this switch is set to the STANDBY ⏻ position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

② Open/close button (▲ OPEN/CLOSE)
This button can be used to open or close the cassette holder.

③ Cassette holder

④ Indicators section
(Refer to page 4.)

⑤ Monitor switch (MONITOR)
In order to monitor the tape (check the recording condition), the sound on the tape (immediately after recording) and the sound of the sound source (the original sound, before recording) can be alternately selected by pressing this button. (The corresponding indicator will illuminate.)

⑥ Recording-level control (REC LEVEL)
This control can be used to regulate the recording level.

⑦ Recording-balance control (BALANCE)
This control can be used to balance the left and right sound levels during recording.

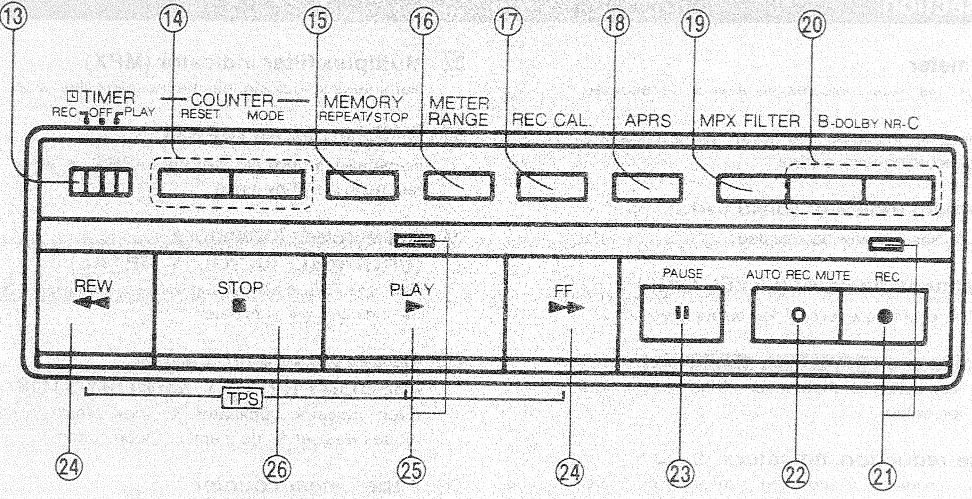
⑧ Calibration-level control (REC CAL LEVEL)
The sensitivity differences (high or low recording levels) for each tape type can be corrected by using these controls.

⑨ Calibration-bias control (REC CAL BIAS)
The frequency response for each tape type can be equalized by using this control.

⑩ Operation section
(Refer to "Control section Ⅱ" on pages 3, 4.)

⑪ Headphones jack (PHONES)

⑫ Headphones volume control (PHONES LEVEL)


⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
TIMER
REC OFF PLAY
COUNTER
RESET
MODE
MEMORY
REPEAT/STOP
METER
RANGE
REC CAL.
APRS
MPX FILTER
B-DOLBY NR-C
REW
STOP
PLAY
FF
PAUSE
AUTO REC MUTE
REC
TPS
㉔
㉖
㉕
㉔
㉓
㉒
㉑

Control section II

⑬ Timer switch (⏲ TIMER)

This switch is used to automatically begin a tape recording or tape playback at a certain time, selected by a timer (not included).

⑭ Counter buttons (COUNTER RESET, MODE)

RESET: This button can be used to reset the tape/linear counter indication to "000_/00.00".

MODE: This button can be used to select the tape/linear counter indication.

⑮ Memory-mode button (MEMORY REPEAT/STOP)

REPEAT: This button can be used to set this unit to the "A–B repeat" mode.

STOP: This button can be used to rewind the tape to the preset "000_/00.00" point when the rewind (◀◀) button is pressed.

⑯ Meter-range selector (METER RANGE)

This selector can be used to select the meter-range display of the input level meter.

⑰ Calibration selector (REC CAL)

This selector can switch the input level display between the level adjustment indicator and bias adjustment indicator.

⑱ APRS button (APRS)

This button can be used to hold the peak level while monitoring the input sound.

⑲ Multiplex filter switch (MPX FILTER)

This prevents the Dolby NR circuit from operating in error when FM stereo broadcasts are recorded using the noise reduction function.

⑳ Dolby noise-reduction buttons (B-DOLBY NR-C)

These buttons can be used to reduce the hiss noise that is characteristic of tape. This unit is provided with both the Dolby B type and C type noise-reduction systems.

㉑ Record button and indicator (● REC)

This button can be used to change the tape deck to the recording stand-by mode.

㉒ Automatic-record-muting button (○ AUTO REC MUTE)

This button can be used to make a silent interval on the tape being recorded on tape deck.

㉓ Pause button (❚❚ PAUSE)

This button can be used to temporarily stop the tape playback or recording of tape deck.

㉔ Rewind/fast-forward/search buttons (◀◀ REW, ▶▶ FF, TPS)

These buttons can be used to fast forward or rewind the tape, or to easily search for the tune's beginning of the tape quickly.

㉕ Playback button and indicator (▶ PLAY)

This button can be used to start the playback or recording of the cassette.

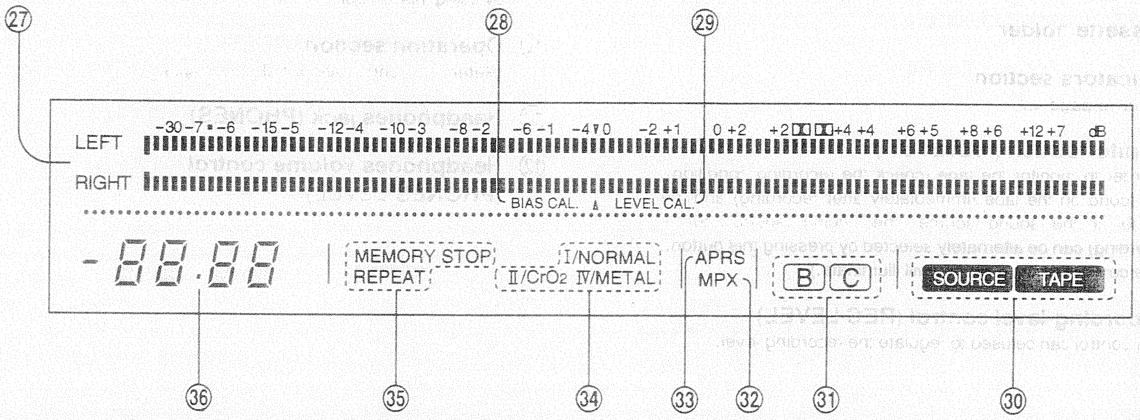
(The tape will then begin moving in the left-to-right direction.)

When this indicator illuminates steadily, it indicates that this tape deck is in the playback mode or the recording mode.

When it flashes continually, this is an indication that this tape deck is in the pause mode or the recording stand-by mode.

㉖ Stop button (■ STOP)

This button can be used to stop tape movement.



Indicators section

㉗ Input level meter

During playback, this meter indicates the level of the recorded sound.

During recording, it indicates the level being recorded, adjusted by the recording-level control.

㉘ Bias adjustment indicator (BIAS CAL.)

Indicates that the bias can now be adjusted.

㉙ Level adjustment indicator (LEVEL CAL.)

Indicates that the recording level can now be adjusted.

㉚ Monitor indicators (SOURCE, TAPE)

Each indicator illuminates to show which of the monitor was set by the monitor switch.

㉛ Dolby noise-reduction indicators (B, C)

Each indicator illuminates to show the type of Dolby noise-reduction system selected by pressing one of the Dolby noise-reduction buttons.

㉜ Multiplex filter indicator (MPX)

Illuminates to indicate that the multiplex filter is set to "ON".

㉝ APRS indicator (APRS)

Illuminates to indicate that the "APRS" is set to "on" in the recording stand-by mode.

㉞ Tape-select indicators (I/NORMAL, II/CrO₂, IV/METAL)

The type of tape being used will be automatically detected and the indicator will illuminate.

㉟ Memory-mode indicators (MEMORY REPEAT, MEMORY STOP)

Each indicator illuminates to show which of the memory modes was set by the memory-mode button.

㊱ Tape/Linear counter

Indicates the amount of tape movement or elapsed time.

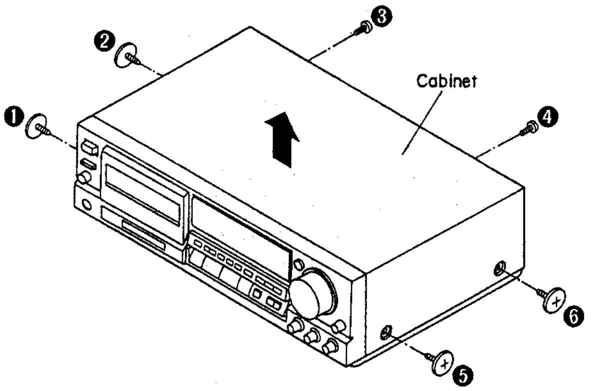
DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1 — **Removal of the cabinet**

Procedure 1



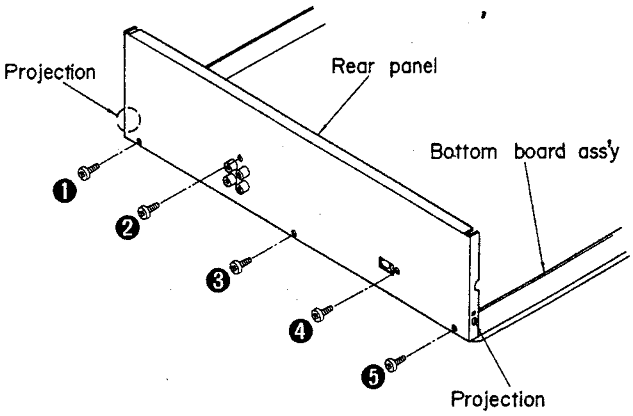
❸
❷
Cabinet
❶
❹
❻
❺

- Remove the 6 screws (❶~❻).

Ref. No. 2 — **Removal of the main P.C.B.**

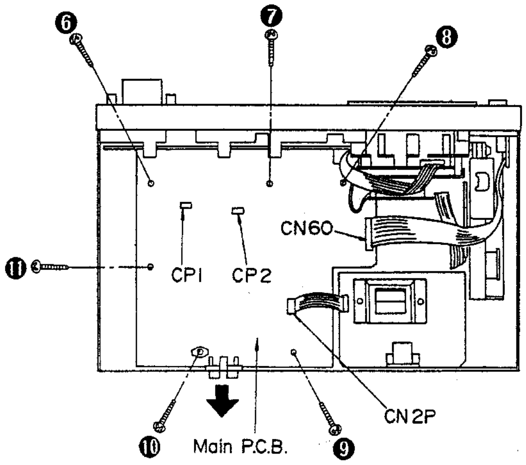
Procedure 1→2

1. Remove the 5 screws (❶~❺).
2. Remove the rear panel from the projection of the bottom board ass'y.



Projection
Rear panel
Bottom board ass'y
❶
❷
❸
❹
❺
Projection

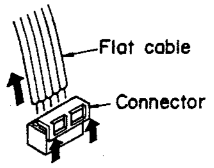
3. Remove the 6 screws (❻~⓫).
4. Remove the 2 connectors (CP1, CP2).
5. Remove the 2 flat cables (CN2P, CN60).
6. Remove the main P.C.B. in the direction of arrow.



❻
❼
❽
CN60
⓫
CP1
CP2
CN2P
❿
Main P.C.B.
❾

How to remove the flat cable

1. Lift the connector.
2. Pull out the flat cable.

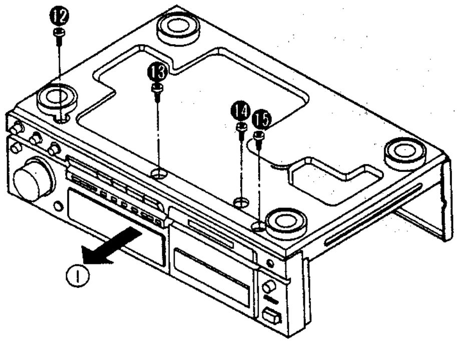


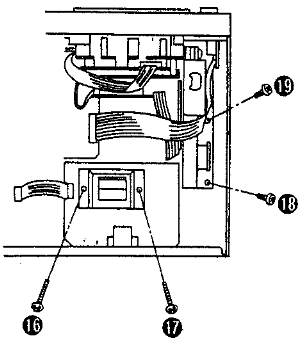
Flat cable
Connector

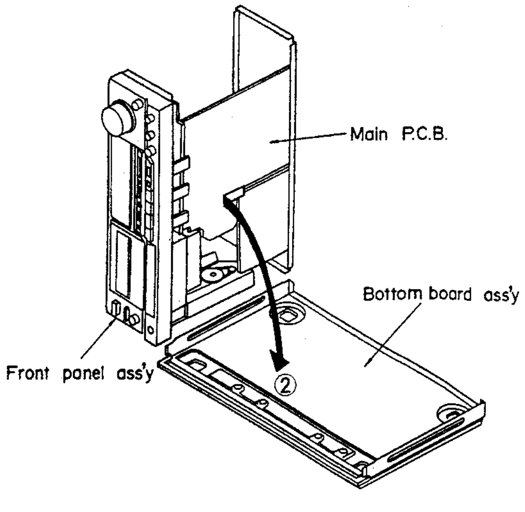
How to check the main P.C.B.

- When checking the soldered surfaces of main P.C.B. and replacing the parts, do as show.

1. Remove the 9 screws (❶, ❸, ❺~⓫) in above figure.
2. Remove the 8 screws (⓬~⓳).
3. Remove the front panel ass'y in the direction of arrow ①.
4. Remove the bottom board ass'y in the direction of arrow ②.
5. Reinstall the front panel ass'y to the main P.C.B.





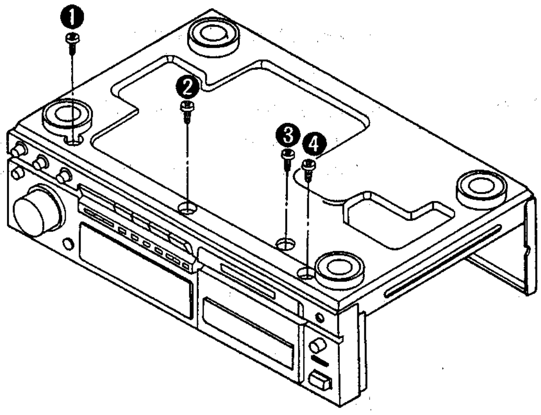


Main P.C.B.
Bottom board ass'y
Front panel ass'y
②

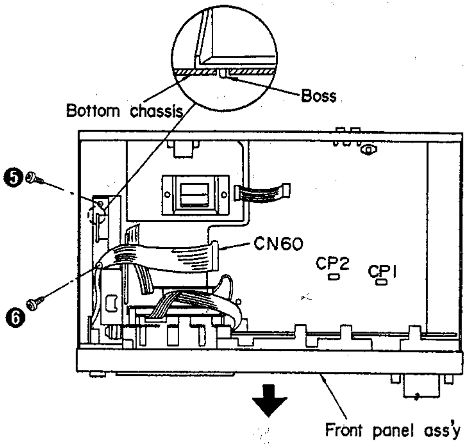
Ref. No.
3

Removal of the front panel ass'y

Procedure
1→3



1. Remove the 6 screws (❶~❻).

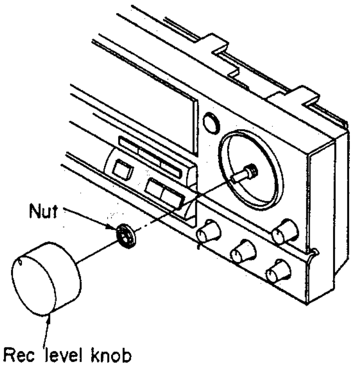

Bottom chassis
Boss
❺
❻
CN60
CP2
CP1
Front panel ass'y

2. Remove the 2 connectors (CP1, CP2).
3. Remove the 1 flat cable (CN60).
4. Remove the boss from bottom chassis.
5. Remove the front panel ass'y in the direction of arrow.

Ref. No.
4

Removal of the FL drive P.C.B.

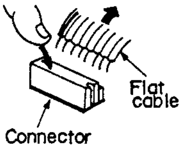
Procedure
1→3→4

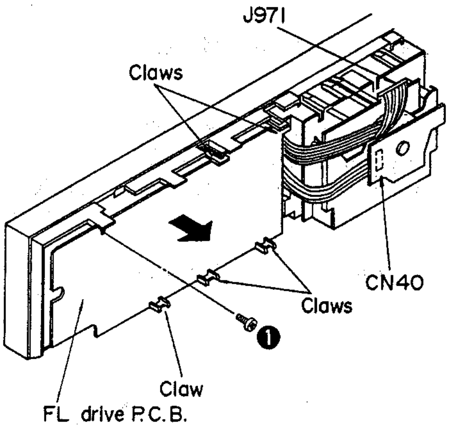

Nut
Rec level knob

1. Pull out the rec level knob.
2. Remove the nut.

How to remove the flat cable

- Pull out the flat cable while pressing the connector.


Flat cable
Connector

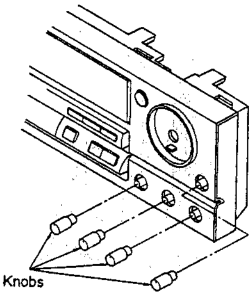

J971
Claws
CN40
Claws
❶
Claw
FL drive P.C.B.

3. Remove the 2 flat cables (CN40, J971).
4. Remove the 1 screw (❶).
5. Release the 5 claws.
6. Remove the FL drive P.C.B. in the direction of arrow.

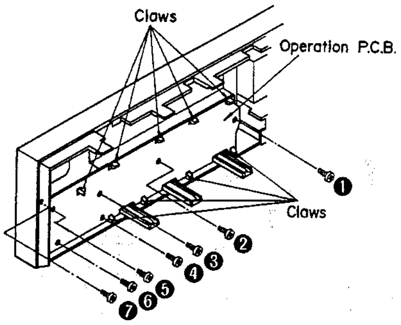
Ref. No.
5

Removal of the operation P.C.B.

Procedure
1→3→4→5



1. Pull out the 4 knobs.

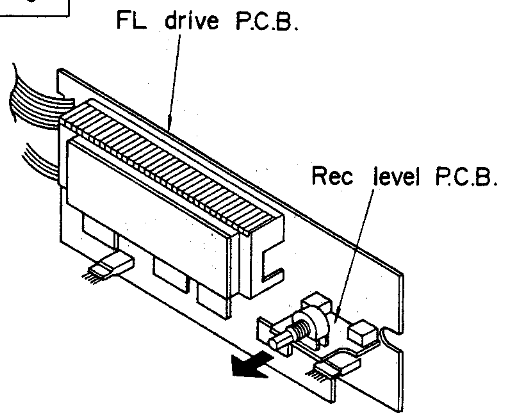

Claws
Operation P.C.B.
❶
Claws
❷
❸
❹
❺
❻
❼

2. Remove the 7 screws (❶~❼).
3. Remove the 9 claws.

Ref. No.
6

Removal of the rec level P.C.B.

Procedure
1→3→4→6

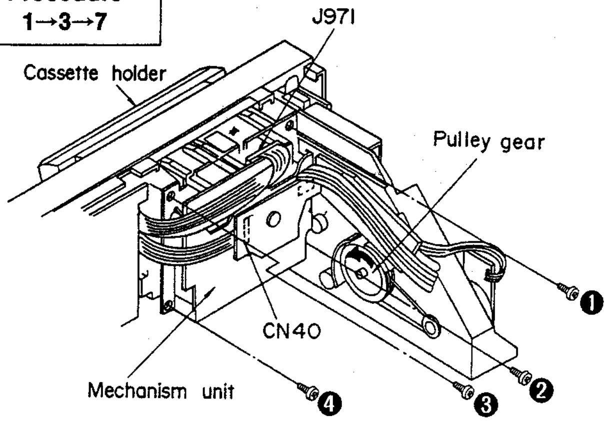

FL drive P.C.B.
Rec level P.C.B.

- Remove the rec level P.C.B. in the direction of arrow.

Ref. No.
7

Removal of the mechanism unit

Procedure
1→3→7

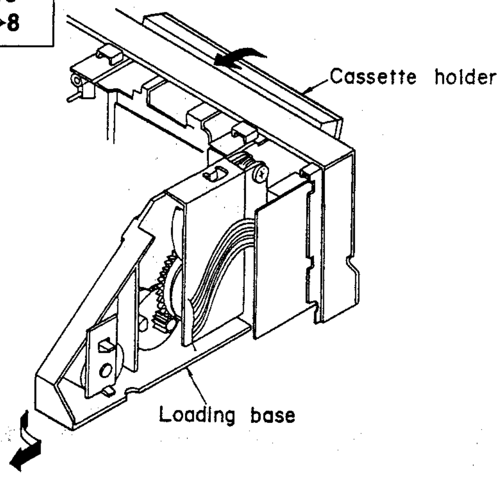

J971
Cassette holder
Pulley gear
❶
CN40
❷
Mechanism unit
❹
❸

1. Turn the pully gear in the direction of arrow, and open the cassette holder.
2. Remove the 2 flat cables (CN40, J971).
3. Remove the 4 screws (❶~❹).

Ref. No.
8

Removal of the loading base

Procedure
1→3→7→8

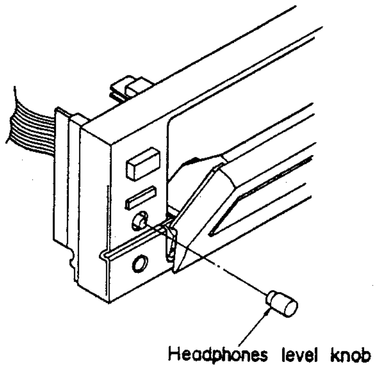

Cassette holder
Loading base

1. Close the cassette holder.
2. Remove the loading base in the direction of arrow.

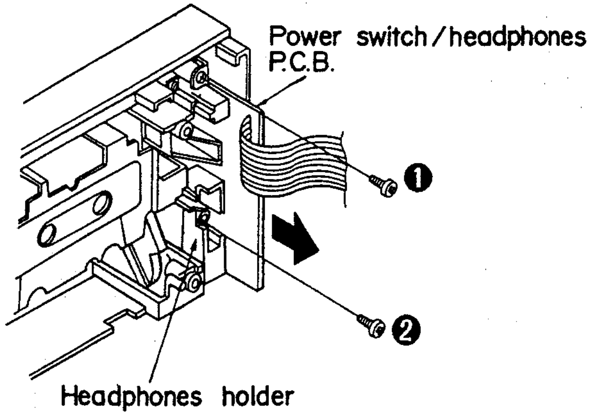
Ref. No.
9

Removal of the power switch/ headphones P.C.B.

Procedure
1→3→7→8→9


Headphones level knob

1. Pull out the headphones level knob.

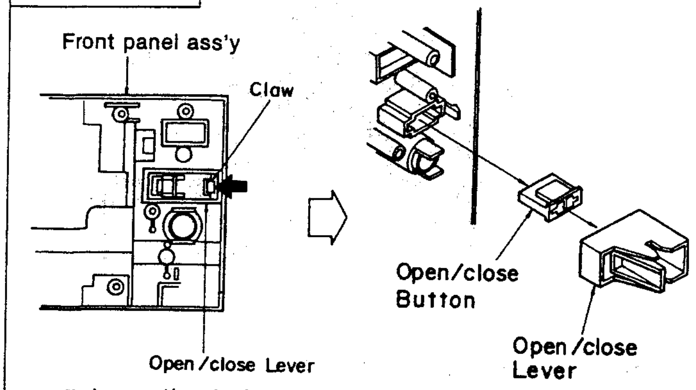

Power switch/headphones P.C.B.
❶
❷
Headphones holder

2. Remove the 2 screws (❶, ❷).
3. Remove the headphones holder.
4. Remove the power switch/headphones P.C.B. in the direction of arrow.

Ref. No.
10

Removal of the open/close lever and open/close button

Procedure
1→3→7→8
→9→10

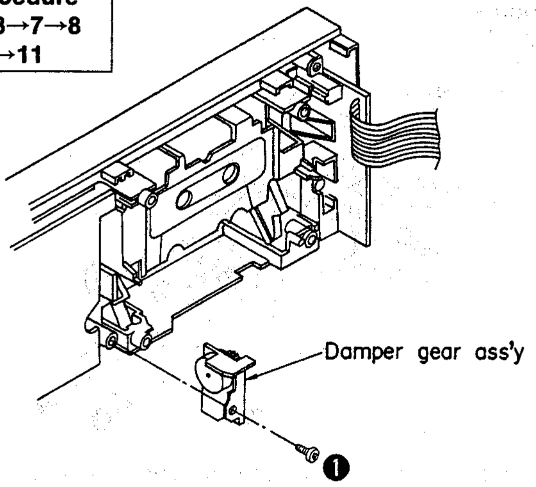

Front panel ass'y
Claw
Open/close Lever
Open/close Button
Open/close Lever

- Release the 1 claw.

Ref. No.
11

Removal of the damper gear ass'y

Procedure
1→3→7→8
→11

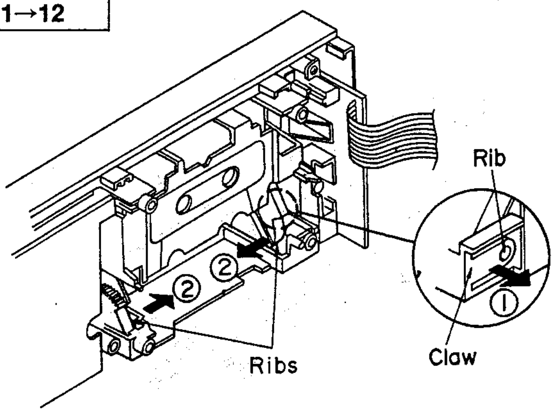

Damper gear ass'y
❶

- Remove the 1 screw (❶).

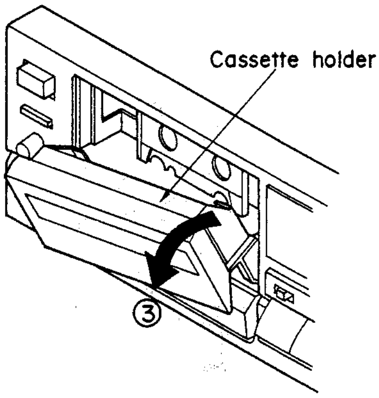
Ref. No.
12

Removal of the cassette holder

Procedure
1→3→7→8
→11→12


Rib
②
②
①
Ribs
Claw

1. Remove the claw in the direction of arrow ①.
2. Remove the ribs in the direction of arrow ②.

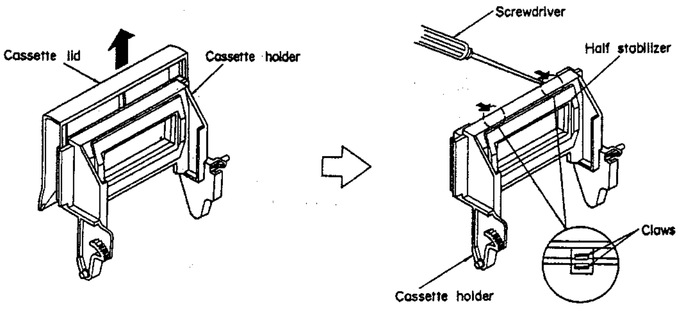

Cassette holder
③

3. Remove the cassette holder in the direction of arrow ③.

Ref. No.
13

Removal of the cassette lid and cassette half stabilizer

Procedure
1→3→7→8
→11→12→13

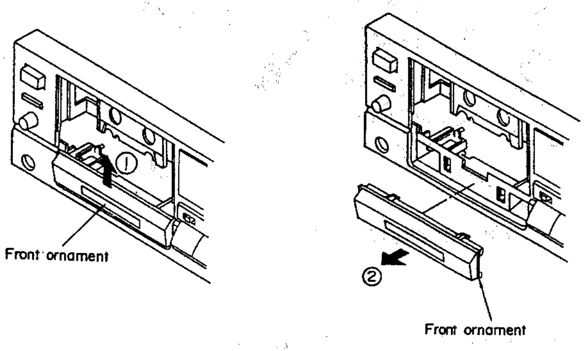

Cassette lid
Cassette holder
Screwdriver
Half stabilizer
Claws
Cassette holder

1. Remove the cassette lid in the direction of arrow.
2. Release the 2 claws.

Ref. No.
14

Removal of the front ornament

Procedure
1→3→7→8
→11→12→14

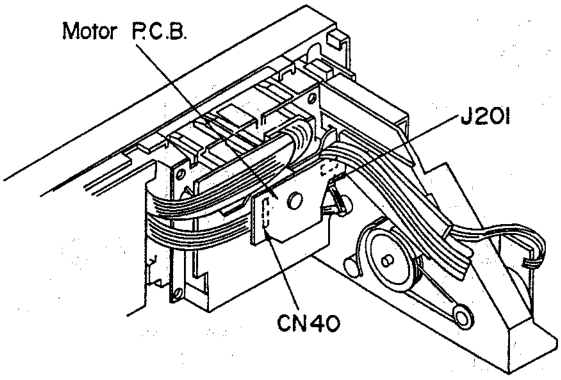

①
Front ornament
②
Front ornament

- Remove the front ornament in the direction of arrow ①, ②.

Ref. No.
15

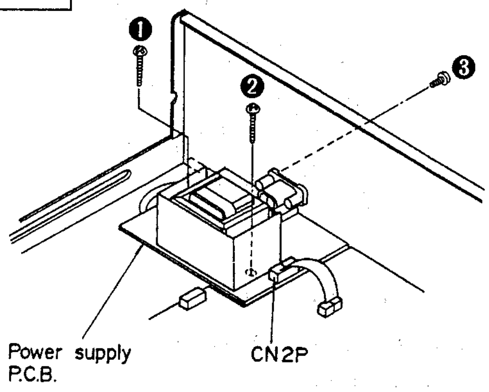
Removal of the motor P.C.B.

Procedure
1→3→15


Motor P.C.B.
J201
CN40

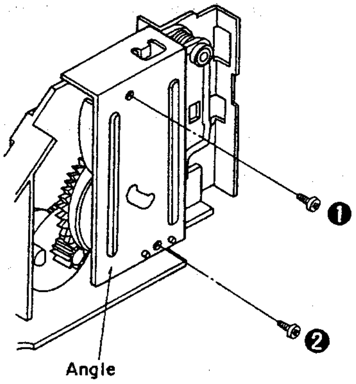
1. Remove the 2 flat cables (CN40, J201).
2. Unsolder the motor terminal.

Ref. No. 16	Removal of the power supply P.C.B.
Procedure 1→16	

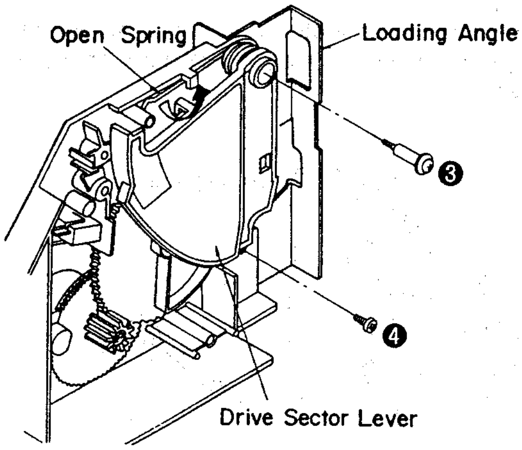

❶
❷
❸
Power supply P.C.B.
CN2P

1. Remove the 1 flat cable (CN2P).
2. Remove the 3 screws (❶~❸).

Ref. No. 18	Removal of the drive sector lever and loading angle
Procedure 1→3→7→8 →18	

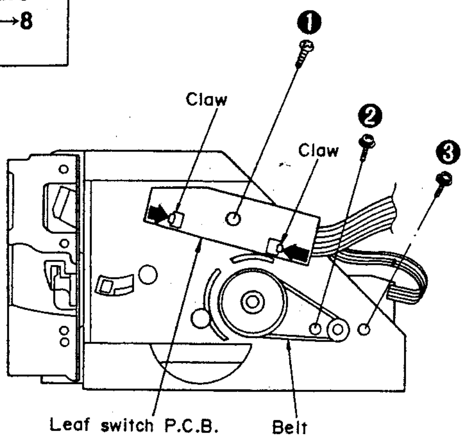


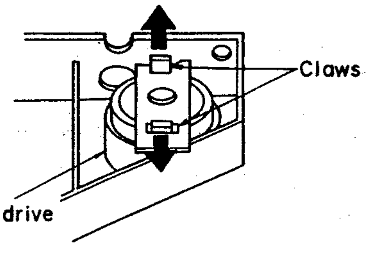
1. Remove the 2 screws (❶, ❷).
2. Remove the angle.


Open Spring
Loading Angle
❸
❹
Drive Sector Lever

3. Remove the 2 screws (❸, ❹).
4. Remove the loading angle.
5. Remove the open lever spring in the direction of arrow.

Ref. No. 17	Removal of the leaf switch P.C.B. and eject drive motor
Procedure 1→3→7→8 →17	


❶
Claw
❷
Claw
❸
Leaf switch P.C.B.
Belt


Claws
Eject drive motor

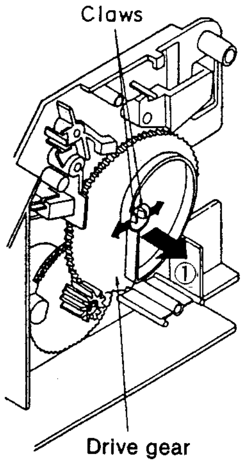
■ Removal of the leaf switch P.C.B.

1. Remove the 1 screw (❶).
2. Release the 2 claws.

■ Removal of the eject drive motor

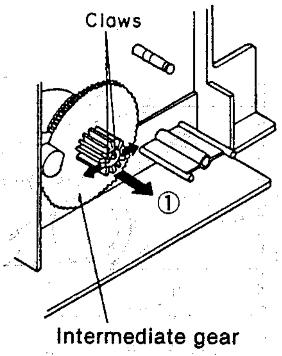
1. Remove the belt.
2. Remove the 2 screws (❷, ❸).
3. Release the 2 claws.

Ref. No. 19	Removal of the drive gear
Procedure 1→3→7→8 →18→19	


Claws
①
Drive gear

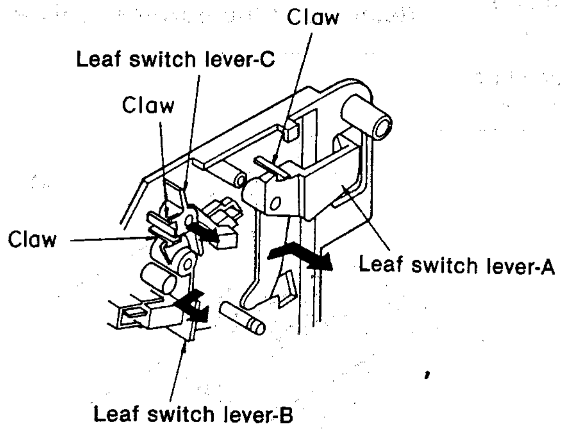
1. Release the 2 claws.
2. Remove the drive gear in the direction of arrow ①.

Ref. No. 20	Removal of the intermediate gear, leaf switch lever-A, leaf switch lever-B, and leaf switch lever-C
Procedure 1→3→7→8 →18→19→20	


Claws
①
Intermediate gear

■ **Removal of the intermediate gear**

1. Release the 2 claws.
2. Remove the intermediate gear in the direction of arrow ①.


Claw
Leaf switch lever-C
Claw
Claw
Leaf switch lever-A
Leaf switch lever-B

■ **Removal of the leaf switch lever-A**

- Release the 1 claw.

■ **Removal of the leaf switch lever-B**

- Release the 1 claw.

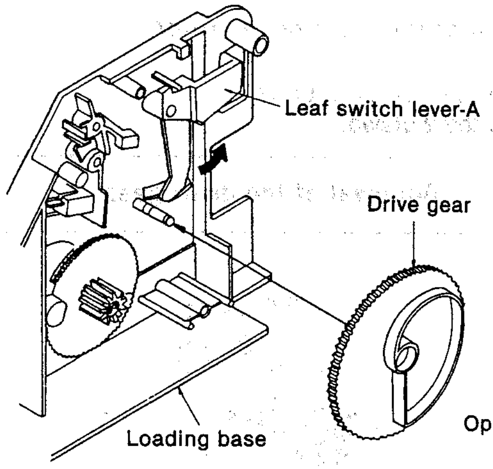
■ **Removal of the leaf switch lever-C**

- Release the 1 claw.

Ref. No. 21	Installation of the drive gear and drive sector lever
Procedure 21	

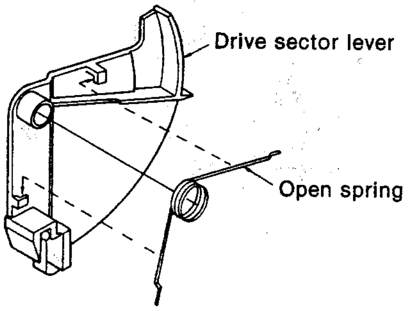
■ **Installation of the drive gear**

1. Push the leaf switch lever A in the direction of arrow.
2. Place the drive gear as shown below and then install it in the loading base.

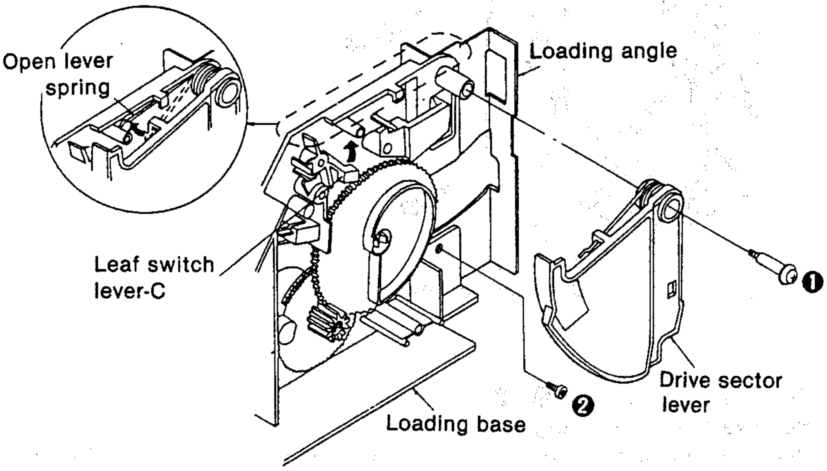

Leaf switch lever-A
Drive gear
Loading base

■ **Installation of the drive sector lever**

1. Temporarily install the open spring in the drive sector lever.


Drive sector lever
Open spring

2. Install the loading angle in the loading base and then secure it with the 1 screw (❷).
3. Push the leaf switch lever C in the direction of arrow.
4. Secure the drive sector lever with 1 screw (❶).
5. Engage the open spring in the claw of the loading base.


Open lever spring
Loading angle
Leaf switch lever-C
❶
Drive sector lever
❷
Loading base

MEASUREMENT AND ADJUSTMENT METHODS

Measurement Condition

- Rec. level control; Maximum
- Timer switch; Off
- MPX filter switch; off
- Calibration-bias control; Center
- Rec. balance control; Center
- Calibration-level control; Center
- Dolby NR switch; Off
- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature 20±5°C (68±9°F)

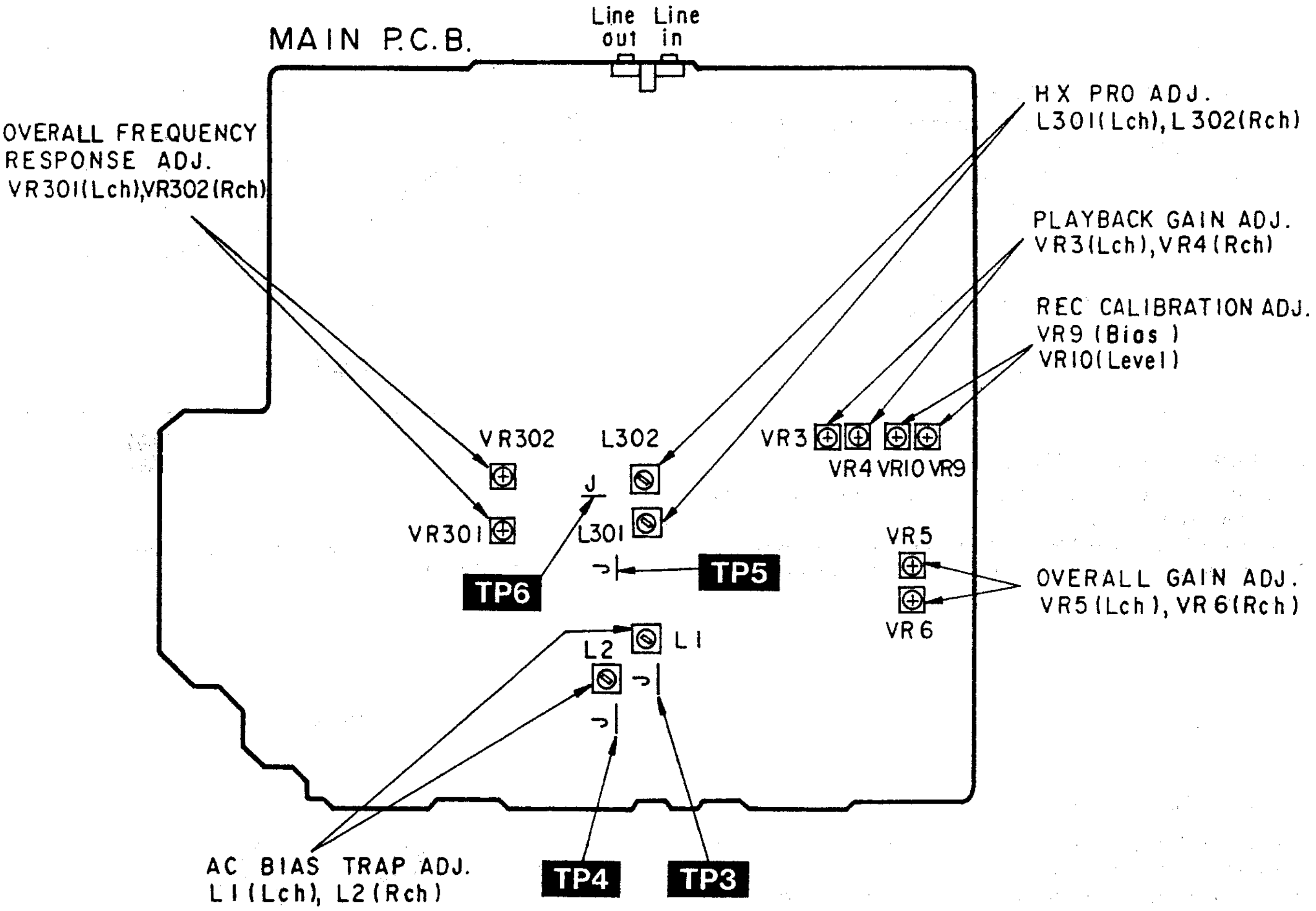
Measuring Instrument

- EVM (Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator
- ATT (Attenuator)
- Resistor (600Ω)

Test tape

- Head azimuth adjustment (8kHz, −20dB); QZZCFM
- Tape speed adjustment (3kHz, −10dB); QZZCWAT
- Playback frequency response (315Hz, 12.5kHz, 10kHz, 8kHz, 4kHz, 1kHz, 250Hz, 125Hz, 63Hz, −20dB); QZZCFM
- Playback gain adjustment (315Hz, 0dB); QZZCFM
- Overall frequency response, Overall gain adjustment
  Normal reference blank tape ; QZZCRA
  CrO_2 reference blank tape; QZZCRX
  Metal reference blank tape; QZZCRZ

• Adjustment Points


MAIN P.C.B.
Line out
Line in
OVERALL FREQUENCY RESPONSE ADJ.
VR301(Lch),VR302(Rch)
HX PRO ADJ.
L301(Lch),L302(Rch)
PLAYBACK GAIN ADJ.
VR3(Lch),VR4(Rch)
REC CALIBRATION ADJ.
VR9 (Bias)
VR10(Level)
VR302
L302
VR3
VR4
VR10
VR9
J
VR301
L301
TP6
TP5
VR5
VR6
OVERALL GAIN ADJ.
VR5(Lch), VR6(Rch)
L1
L2
AC BIAS TRAP ADJ.
L1(Lch), L2(Rch)
TP4
TP3

HEAD AZIMUTH ADJUSTMENT

1. Playback the azimuth adjusment portion (8 kHz, -20 dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the output of the R-CH are maximized.
2. Perform the same adjustment in the play mode.
3. After the adjustment, apply screwlock to the azimuth adjusting screw.

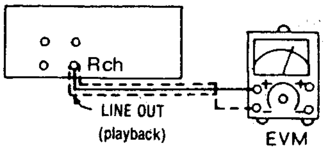

Rch
LINE OUT
(playback)
EVM

Fig.1

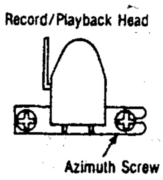

Record/Playback Head
Azimuth Screw

Fig.2

PLAYBACK GAIN ADJUSTMENT

1. Playback the gain adjusted portion (315 Hz, 0 dB) of the test tape (QZZCFM).
2. Adjust **VR3** (L-CH) and **VR4** (R-CH) so that the output is within the standard value.

Standard value: 0.4V±0.5dB

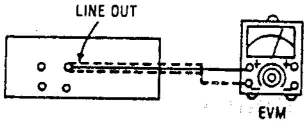

LINE OUT
EVM

Fig. 3

PLAYBACK FREQUENCY RESPONSE

1. Playback the frequency response portion (315Hz, 12.5kHz~63Hz, −20dB) of the test tape (QZZCFM).
2. Assure that the frequency response is within the range shown in **Fig. 5** for both L-CH and R-CH.

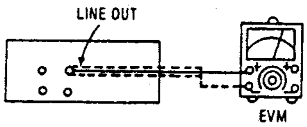

LINE OUT
EVM

Fig. 4

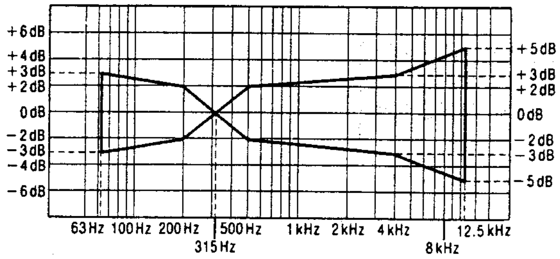


Fig. 5

AC BIAS TRAP ADJUSTMENT

1. Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record mode.
2. Adjust **L1** (L-CH) [[**L2** (R-CH)]] so that the output voltage between **TP3** (**TP4**) and GND is less than the minimum value.

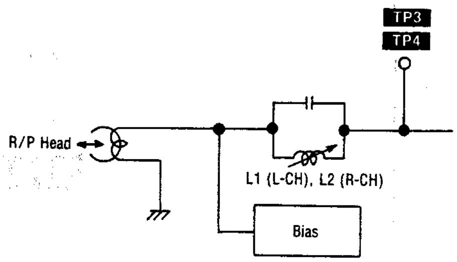

TP3
TP4
R/P Head
L1 (L-CH), L2 (R-CH)
Bias

Fig. 6

HX PRO ADJUSTMENT

1. Insert the Metal blank tape (QZZCRZ) and set the unit to the Record Pause mode.
2. Connect a DC voltmeter across **TP5** (L-CH) and GND, **TP6** (R-CH) and GND.
3. Adjust **L301** (L-CH) and **L302** (R-CH)so that the output is the minimum value.

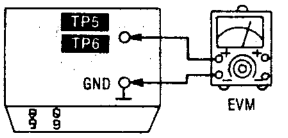

TP5
TP6
GND
EVM

Fig. 7

OVERALL FREQUENCY RESPONSE

1. Insert the normal blank test tape (QZZCRA) and set the unit to the record pause mode.
2. Apply a reference input signal (1kHz, −24dB) through an attenuator.
3. Attenuate the signal by 20dB and adjust the frequency from 50Hz~10kHz.
4. Record the frequency sweep.
5. Playback the recorded signal and assure that it is within the range shown in **Fig. 8** in comparison to the reference frequency (1kHz).
6. If it is not within the standard range, adjust **VR301** (L-CH) and **VR302** (R-CH) so that the frequency level is within the standard range.
   - Level up in high frequency range........Increase the bias current.
   - Level down in high frequency range....Decrease the bias current.
7. Repeat steps 2~6 above using the CrO_2 tape (QZZCRX) and the metal tape (QZZCRZ) increasing the frequency range to 12.5kHz (50Hz~12.5kHz).
8. Assure that the level is within the range shown in **Fig. 9**.

Normal Overall frequency response chart (NR OUT)

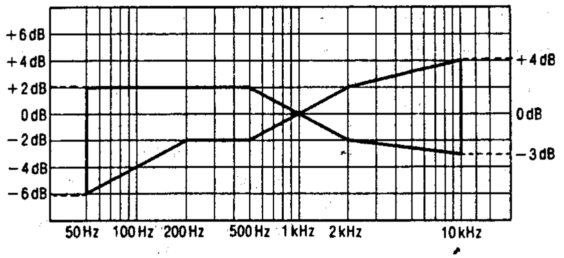


Fig. 8

CrO_2•Metal Overall frequency response chart (NR OUT)

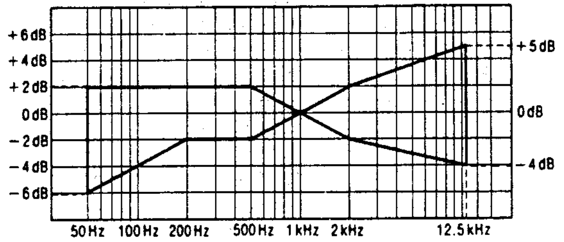


Fig. 9

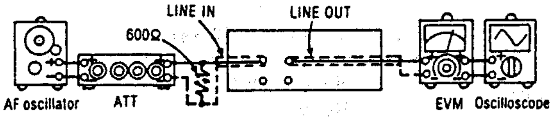


Fig. 10

OVERALL GAIN ADJUSTMENT

1. Insert the normal blank test tape (QZZCRA) and set the unit to the record pause mode.
2. Apply a reference input signal (1kHz, −24dB). Attenuate the output so that its level becomes 0.4V.
3. Record this input signal.
4. Playback the signal recorded in step 3 above, and assure that the output is within the standard value.
5. If it is not within the standard value, adjust **VR5** (L-CH) and **VR6** (R-CH).
6. Repeat the step 2~5 above until the output is within the standard value.

Standard value: 0.4V±0.5dB

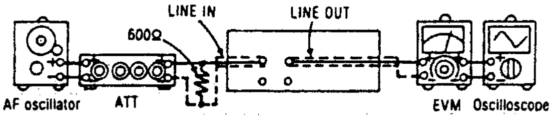


Fig. 11

REC CAL. ADJUSTMENT

1. After the overall frequency characteristics and over all gain are adjusted, insert the test tape (QZZCRA) in the unit and then set the recording mode (REC/PLAY).

— Level Adjustment —

2. First, press the REC CAL button. (The indication "LEVEL CAL" will appear in the FL meter.)
3. Adjust **VR10** so that the level of the right and left channels reach the $\updownarrow$ mark as shown.

— Bias Adjustment —

4. Next, press the REC CAL button again. ("BIAS CAL" will be displayed in the FL meter.)
5. Adjust **VR9** so that the indication of the left channel level reaches the $\updownarrow$ mark as shown.

(Level Adjustment)

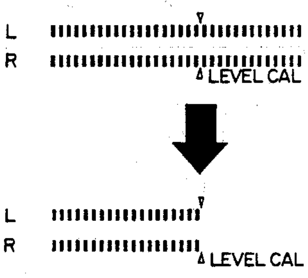


Fig. 12

(Bias Adjustment)

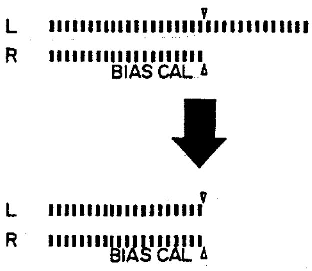


Fig. 13

Note: Unless the overall frequency and overall gain are adjusted so that the L/R channel leverls are the same, there will be a difference between the L/R channels levels in the level and bias adjustments.

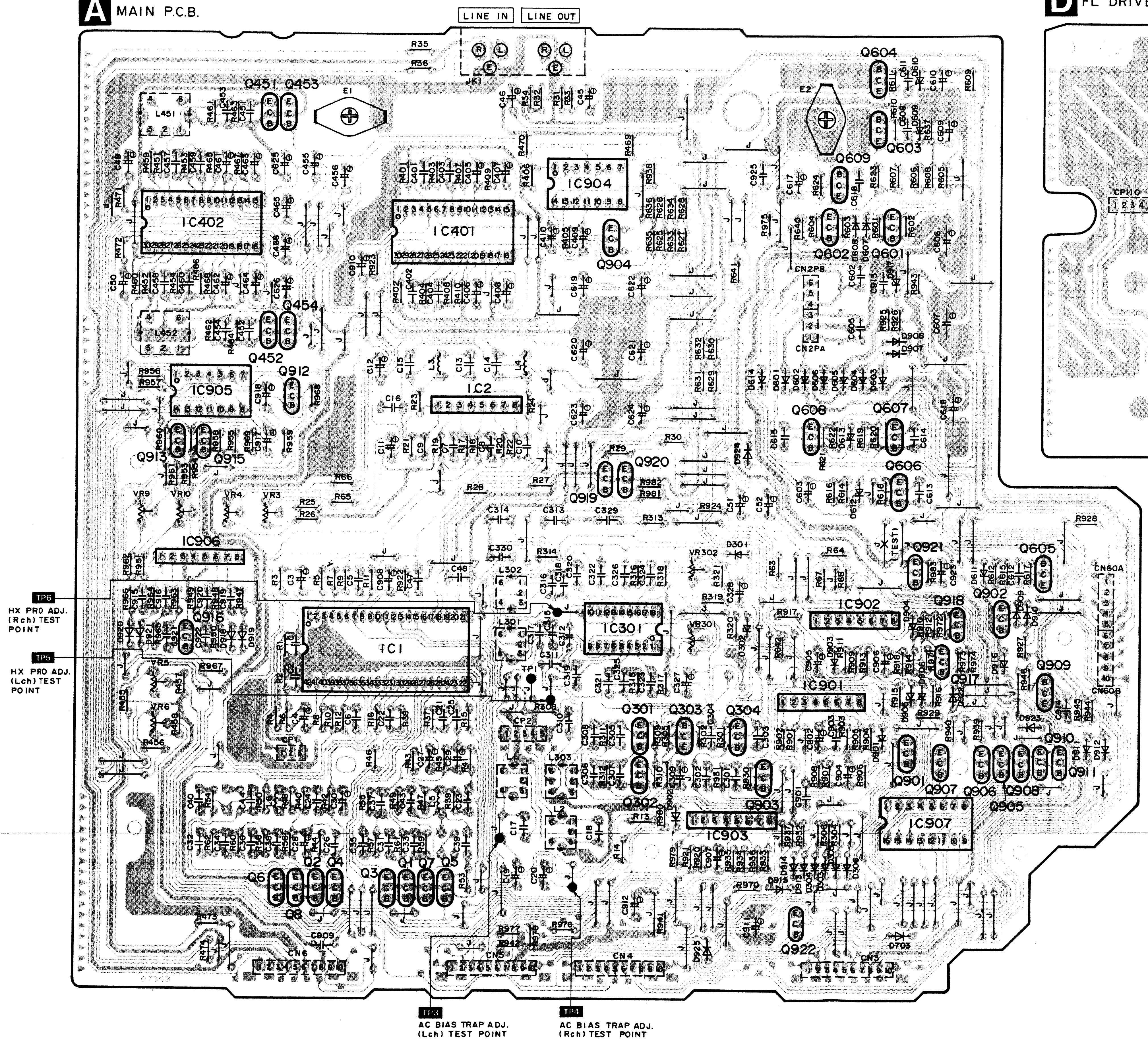
■TERMINAL FUNCTION OF IC'S

- **IC501 (M50942-518SP): MICROCOMPUTER (This microcomputer is used for mechanical/FL DRIVE operation.)**

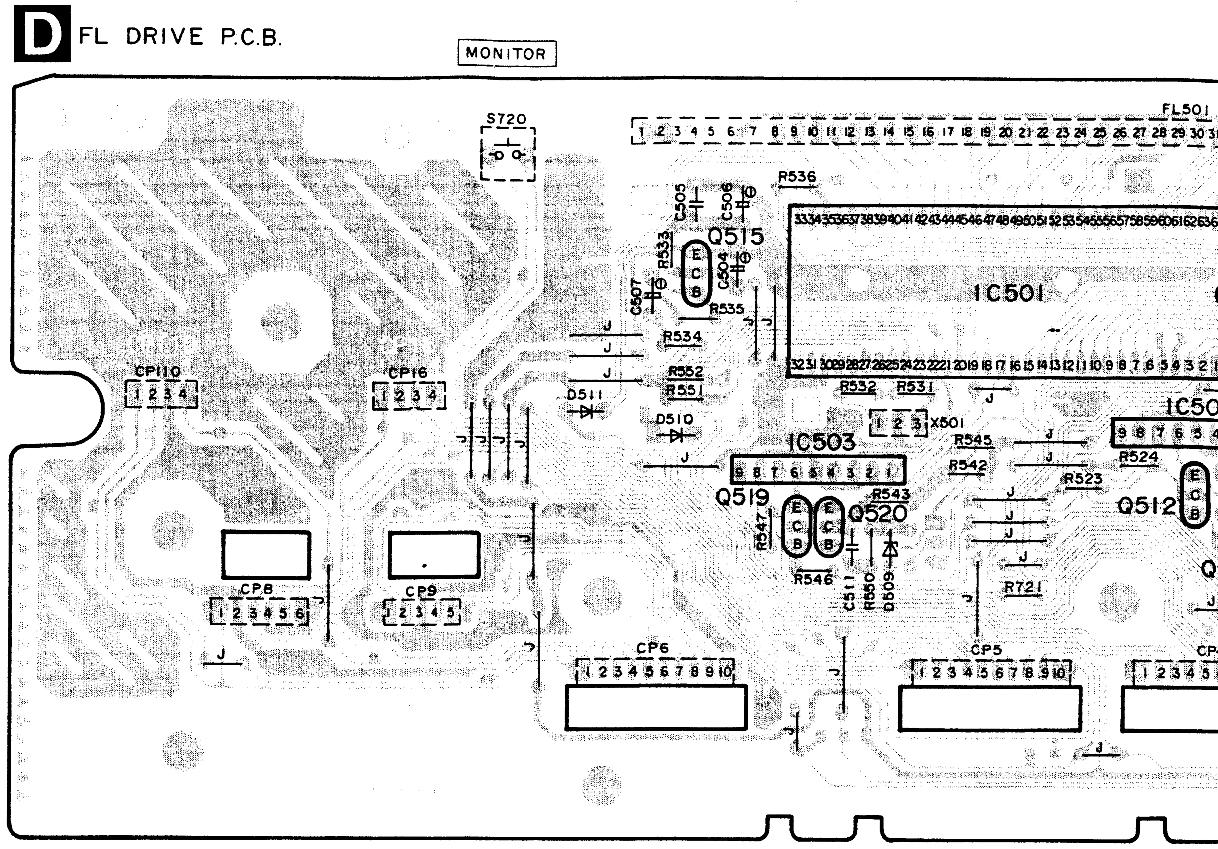
Pin No.	Mark	I/O Division	Function
1	V_{REF}	I	A/D converter reference voltage (Connected to AV_{CC})
2	KEY1	I	Key switch input STOP, FF, REW, PLAY, REC, PAUSE, Dolby, B.C, MPX, TPLAY, TREC
3	KEY2	I	Key switch input C-RESET, C-MODE, M-RANGE, MEMORY, ARM, APRS, RECAL
4	MLCH	I	Lch indication level input
5	MRCH	I	Rch indication level input
6	APRS	I	Input Vol. position det. for APRS
7	R. INH	I	Motor switch, rec. inh. switch motor switch OFF: 0V, Rec. OK: 1.5V, NG: 5V
8	TAPE	I	OPEN switch, ATS switch input OPEN: 0V, Nor: 1.1V, CrO_2: 2.4V, Metal: 5V
9	RPT	I	Reel table (take up side) rotary det.
10	CAPM	O	Capstan motor ON/OFF control ON: "H", OFF: "L"
11	RMR	O	Reel motor ON/OFF control REW, R • TPS: "H", Others: "L"
12	RMF	O	Reel motor ON/OFF control (REC) PLAY, FF, F • TPS: "H", Others: "L"
13	T. SOL	O	Trigger solenoid ON/OFF control ON: "H", OFF: "L"
14	B. SOL	O	Brake solenoid ON/OFF control FF/REW/TPS: "H", Others: "L"
15	C/R SOL	O	Brake solenoid keep and reel motor speed select FF/REW/TPS: "H", Others: "L"
16	EJECT R	O	Eject motor ON/OFF control OPEN: "H", others: "L"
17	EJECT F	O	Eject motor ON/OFF control CLOSE: "H", others: "L"
18	DMT	O	Line out muting control ON: "H", OFF: "L"
19	RMT	O	Rec amp muting control ON: "H", OFF: "L"
20	CLOCK	O	Serial clock for amp, logic control ($\overline{\text{MPX}}$, $\overline{\text{C}}$, $\overline{\text{B}}$, T/$\overline{\text{S}}$, PLAY, REC, CALF, $\overline{\text{OSCON}}$)
21	DATA	O	Serial clock for amp, logic control ($\overline{\text{MPX}}$, $\overline{\text{C}}$, $\overline{\text{B}}$, T/$\overline{\text{S}}$, PLAY, REC, CALF, $\overline{\text{OSCON}}$)
22	EJTSEL	I	Model select terminal Always: "H"
23	CNTSEL	I	Model select terminal Always: "H"
24	POF	I	Power off det. OFF: "L"
25	REM	I	Not used
26	CNV_{SS}	I	Connected to V_{SS}
27	$\overline{\text{RESET}}$	I	Reset input Normal: "H", Reset: "L"
28	X_{IN}	I	Clock OSC terminal (4MHz)
29	X_{OUT}	O	
30	X_{CIN}	I	Not used, connected to V_{SS}
31	X_{COUT}	O	Not used
32	V_{SS}	I	GND terminal
33	Φ	O	Not used
34	RPS	I	Reel table (supply side) rotary det.
35	MSP	I	TPS (MS) det. No signal: "H" signal ON: "L"
36	MODE	I	Mech. mode switch (REC) PLAY, TPS: "L" Others: "H"
37	HALF	I	Mech. Half switch ON: "L", OFF: "H"
38	V_P	I	Reference voltage terminal
39 ∫ 44	G1 ∫ G6	O	FL grid control signal
45 ∫ 62	S1 ∫ S18	O	FL segment control signal
63	AV_{CC}	I	Power supply terminal for A/D converter
64	V_{CC}	I	Power supply terminal for micro computer

■PRINTED CIRCUIT BOARDS

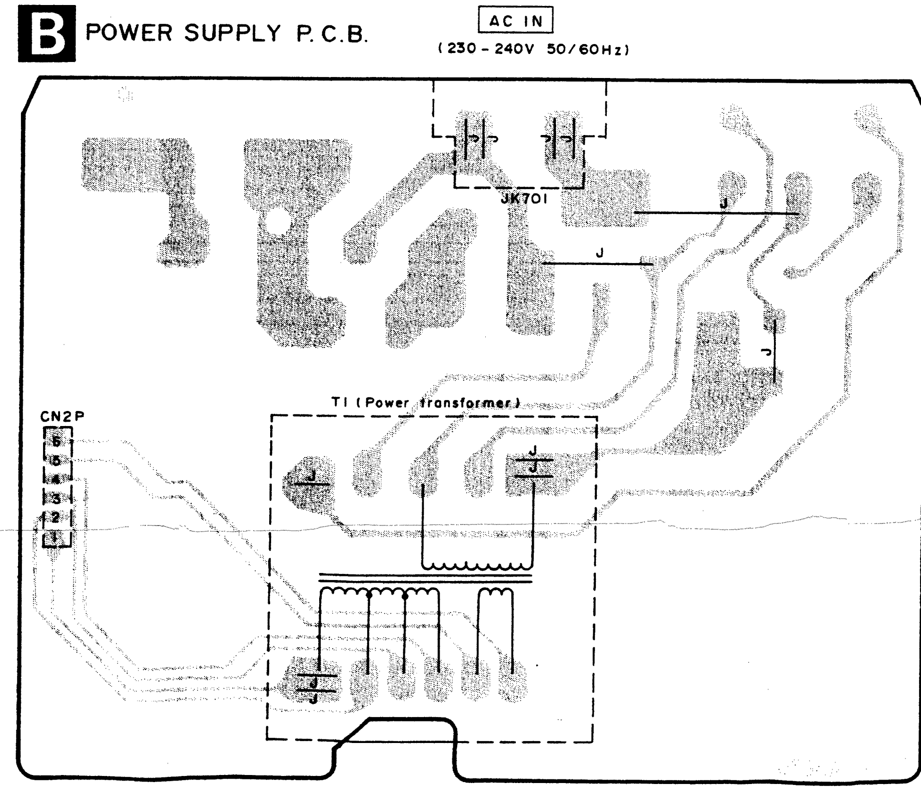
A MAIN P.C.B.

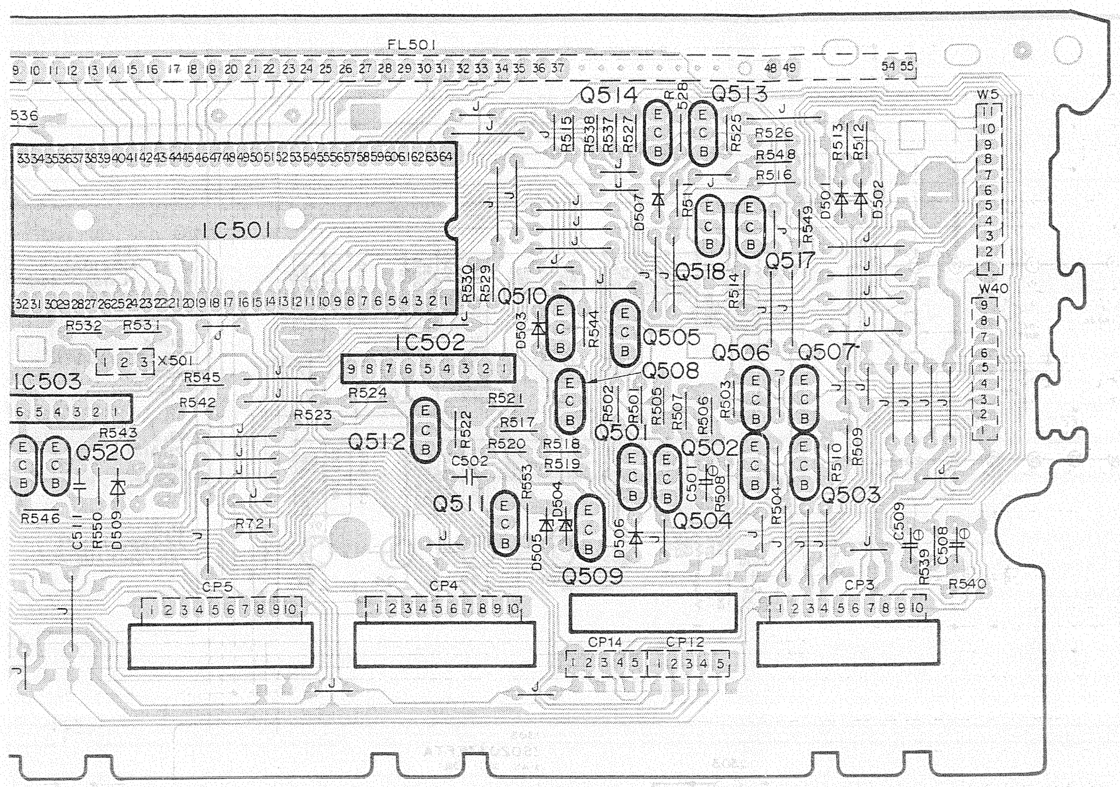

LINE IN
LINE OUT
JK1
E1
E2
IC1
IC2
IC301
IC401
IC402
IC901
IC902
IC903
IC904
IC905
IC906
IC907
VR3
VR4
VR5
VR6
VR9
VR10
VR301
VR302
TP1
TP6
HX PRO ADJ. (Rch) TEST POINT
TP5
HX PRO ADJ. (Lch) TEST POINT
TP3
AC BIAS TRAP ADJ. (Lch) TEST POINT
TP4
AC BIAS TRAP ADJ. (Rch) TEST POINT
CN2PA
CN2PB
CN3
CN4
CN5
CN6
CN60A
CN60B
(TEST)

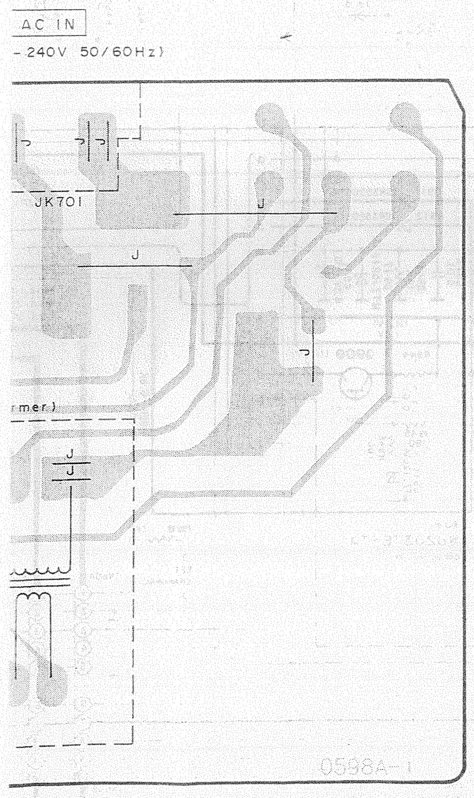
D FL DRIVE P.C.B.


MONITOR
S720
FL501
IC501
IC503
Q512
Q515
Q519
Q520
CP5
CP6
CP8
CP9
CP16
CP110
X501

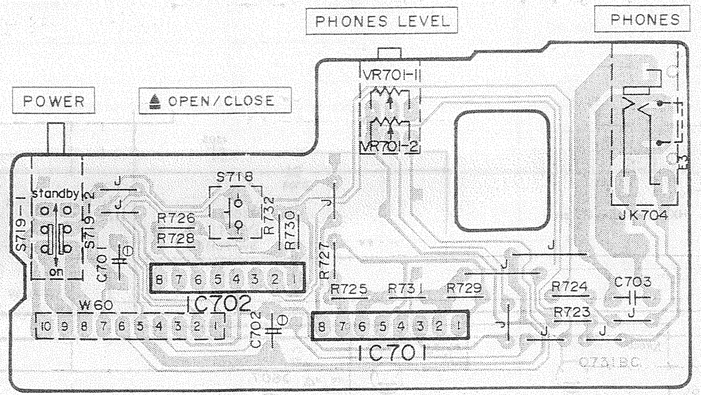
B POWER SUPPLY P.C.B.


AC IN
(230 - 240V 50/60Hz)
JK701
T1 (Power transformer)
CN2P

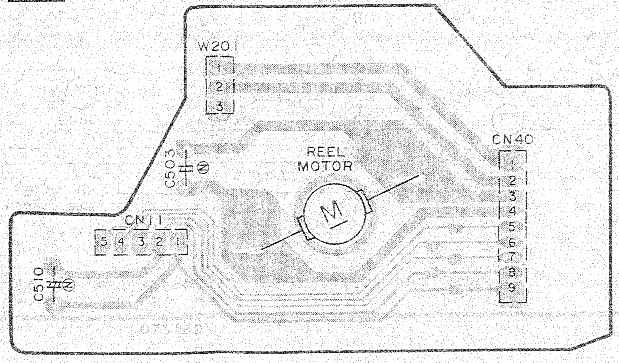

FL501
Q514
Q513
W5
IC501
IC502
IC503
Q510
Q505
Q518
Q517
Q506
Q507
Q508
Q501
Q502
Q503
Q504
Q509
Q511
Q512
Q520
W40
X501
CP5
CP4
CP14
CP12
CP3


AC IN
- 240V 50/60Hz)
JK701
0598A-1

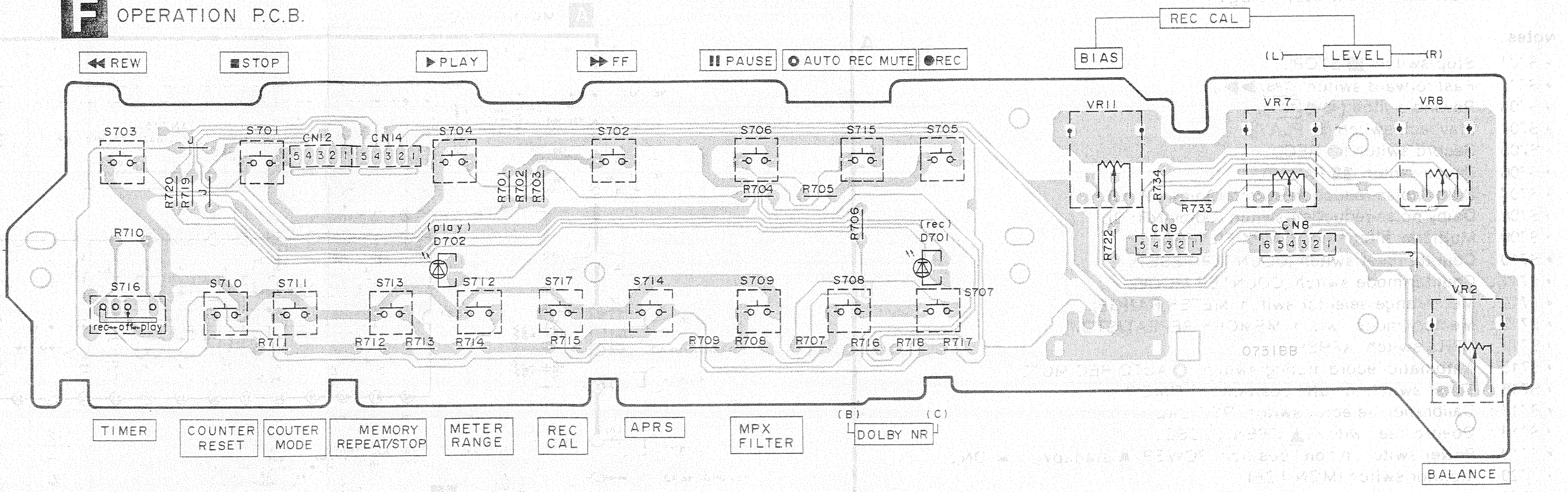
C POWER SWITCH/HEADPHONES P.C.B.


POWER
▲ OPEN/CLOSE
PHONES LEVEL
PHONES
VR701-1
VR701-2
S718
S719-1
S719-2
standby
JK704
R726
R728
R732
R730
R727
C701
IC702
IC701
W60
C702
R725
R731
R729
R724
R723
C703
0731BC

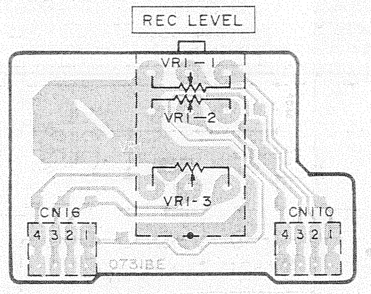
H MOTOR P.C.B.


W201
REEL MOTOR
M
CN40
C503
CN11
C510
0731BD

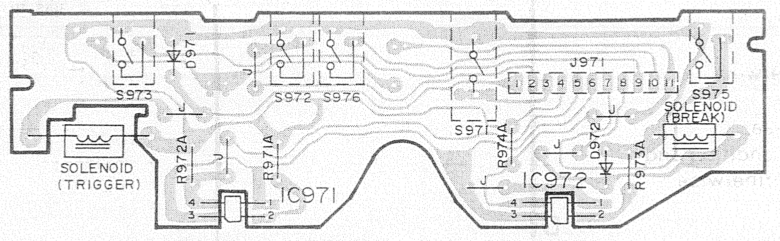
F OPERATION P.C.B.


◀◀ REW
■ STOP
▶ PLAY
▶▶ FF
‖ PAUSE
○ AUTO REC MUTE
● REC
REC CAL
BIAS
(L)
LEVEL
(R)
S703
S701
CN12
CN14
S704
S702
S706
S715
S705
VR11
VR7
VR8
R720
R719
R701
R702
R703
R704
R705
R706
R734
R733
R722
CN9
CN8
R710
(play) D702
(rec) D701
S716
rec—off—play
S710
S711
S713
S712
S717
S714
S709
S708
S707
R711
R712
R713
R714
R715
R709
R708
R707
R716
R718
R717
VR2
0731BB
TIMER
COUNTER RESET
COUTER MODE
MEMORY REPEAT/STOP
METER RANGE
REC CAL
APRS
MPX FILTER
(B)
(C)
DOLBY NR
BALANCE

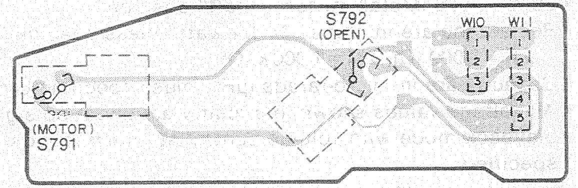
E REC LEVEL P.C.B.


REC LEVEL
VR1-1
VR1-2
VR1-3
CN16
CN110
0731BE

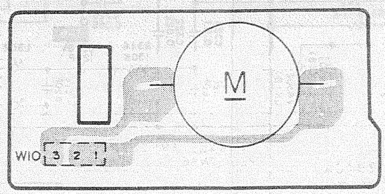
G MECHANISM P.C.B.


S973
D971
S972
S976
J971
S975
SOLENOID (BREAK)
S971
SOLENOID (TRIGGER)
R972A
R971A
IC971
R974A
D972
R973A
IC972

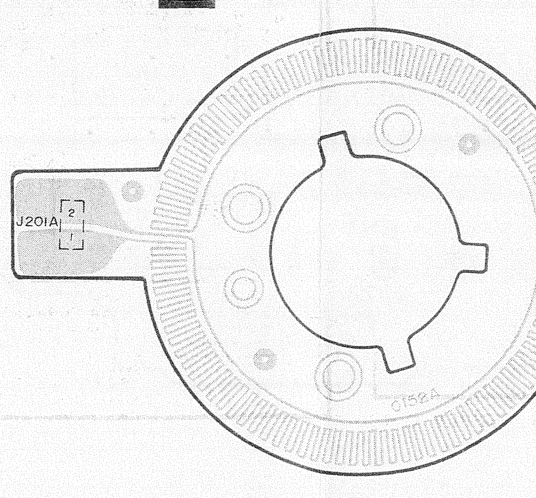
I LEAF SWITCH P.C.B.


S792 (OPEN)
W10
W11
(MOTOR)
S791

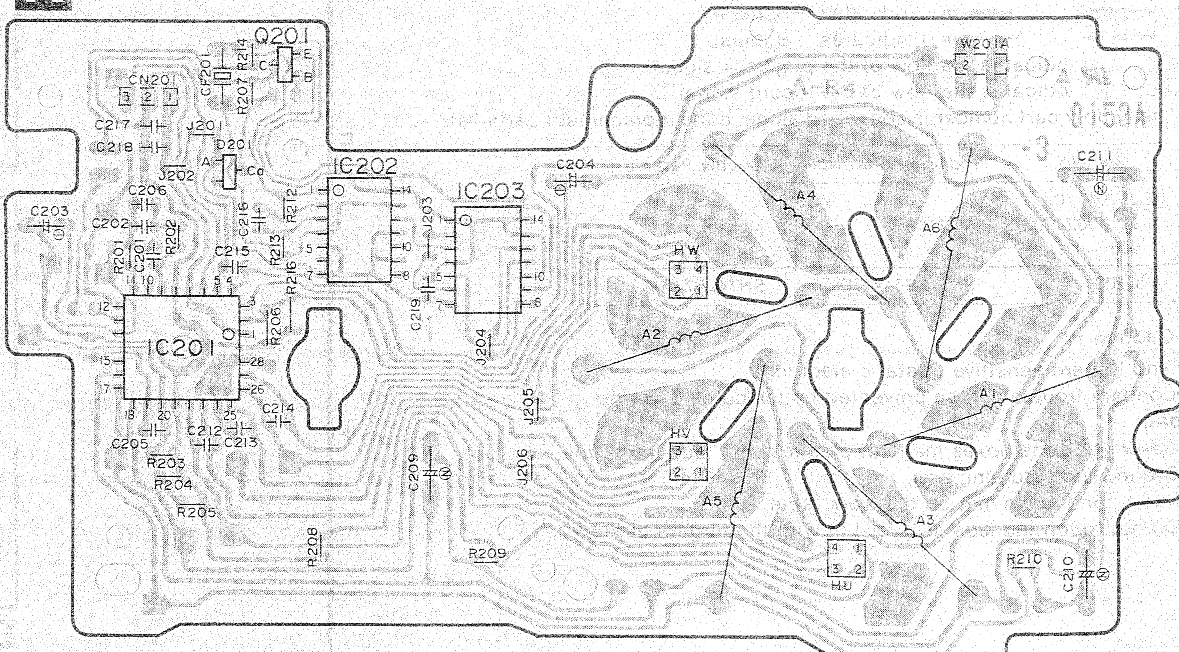
J EJECT DRIVE MOTOR P.C.B.



L FG P.C.B.



K CAPSTAN MOTOR(D.D) P.C.B.


Q201
W201A
CN201
CF201
R214
R207
C217
C218
J201
D201
IC202
IC203
C204
C211
0153A
-3
C203
C206
C202
J202
R202
C216
R212
J203
R213
C215
R201
C201
R206
C219
J204
HW
A4
A6
IC201
C214
C205
C212
C213
R203
R204
R205
J205
C209
J206
A2
A1
HV
A5
A3
R208
R209
HU
R210
C210

SCHEMATIC DIAGRAM (Parts list on pages 38~42.)

(This schematic diagram may be modified at any time with development of new technology.)

Notes:

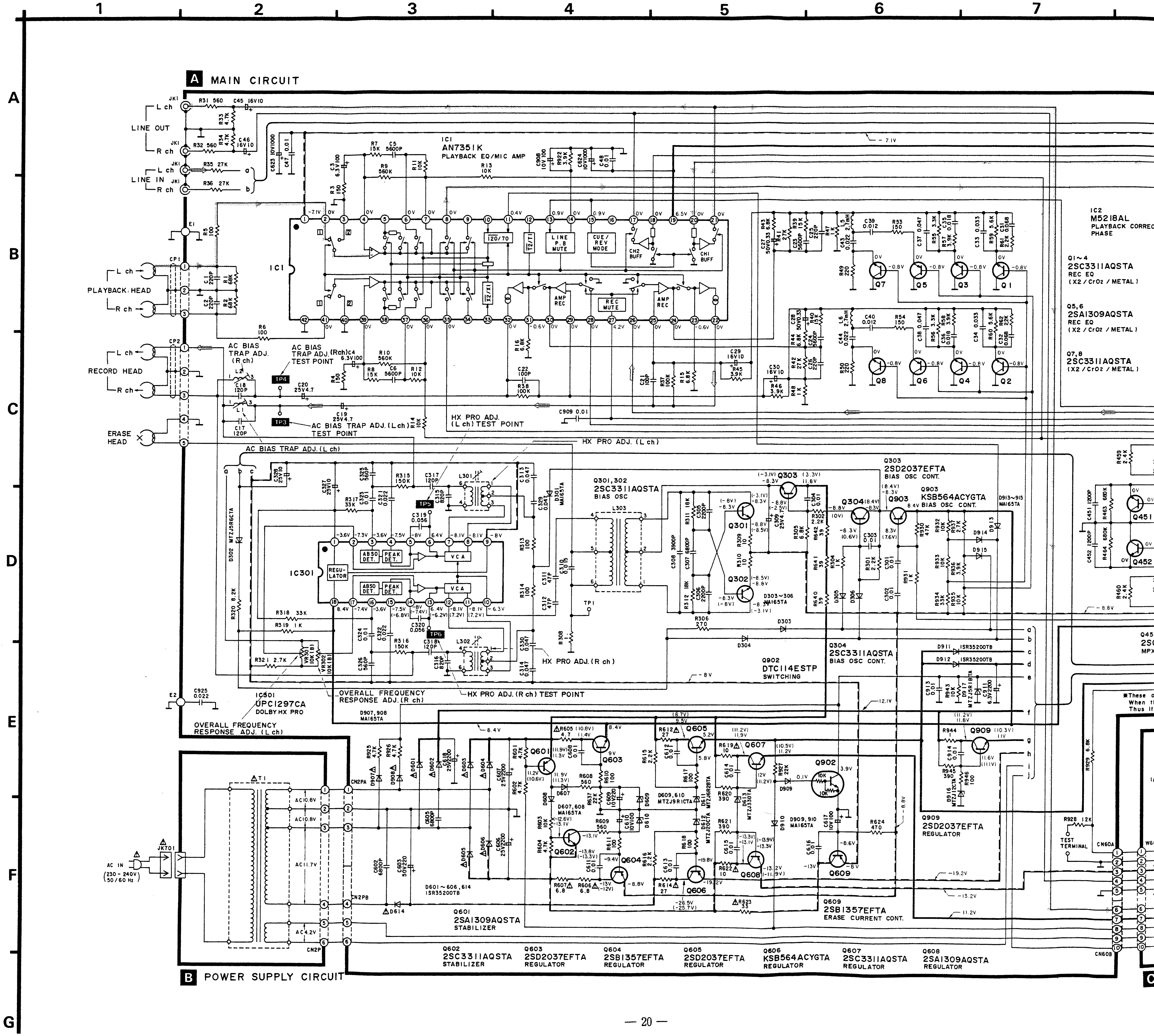
- S701 : Stop switch (■ STOP).
- S702 : Fast-forward switch (TPS ▶▶).
- S703 : Rewind switch (◀◀ TPS).
- S704 : Playback switch (▶ PLAY).
- S705 : Record switch (● REC).
- S706 : Pause switch (❚❚ PAUSE).
- S707 : Dolby noise-reduction switch (Dolby NR; C).
- S708 : Dolby noise-reduction switch (Dolby NR; B).
- S709 : Multiplex filter switch (MPX FILTER).
- S710 : Counter reset switch (COUNTER RESET).
- S711 : Counter mode switch (COUNTER MODE).
- S712 : Meter-range selector switch (METER RANGE).
- S713 : Memory mode switch (MEMORY REPEAT/STOP).
- S714 : APRS switch (APRS).
- S715 : Automatic-record-muting switch (◘ AUTO REC MUTE).
- S716 : Timer switch in "**off**" position (◷ TIMER).
- S717 : Calibration selector switch (REC CAL).
- S718 : Open/close switch (⏏ OPEN/CLOSE).
- S719 : Power switch in "**on**" position (POWER ■ standby ⏻ ▬ ON).
- S720 : Monitor switch (MONITOR).
- S791 : Motor switch in "**off**" position. (Loading)
- S792 : Open switch in "**off**" position. (Loading)
- S971 : Mode switch in "**off**" position.
- S972 : Cassette half detection switch in "**off**" position.
- S973 : ATS (CrO_2) switch in "**off**" positon.
- S975 : Rec. inhibit switch in "**off**" position.
- S976 : ATS (Metal) switch in "**off**" position.
- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.
  1 K=1,000 (Ω), 1 M=1,000k (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
  ( )………Voltage values at record mode.
  For measurement us EVM.
- Important safety notice
  Components identified by ⚠ mark have special characteristics important for safety.
  When replacing any of these components, use only manufacturer's specified parts
- (━━━<+B>━━━) indicates +B (bias).
- (━ ━ ━<−B>━ ━ ━) indicates −B (bias).
- (⇢) indicates the flow of the playback signal.
- (⇨) indicates the flow of the record signal.
- The supply part number is described alone in the replacement parts list.

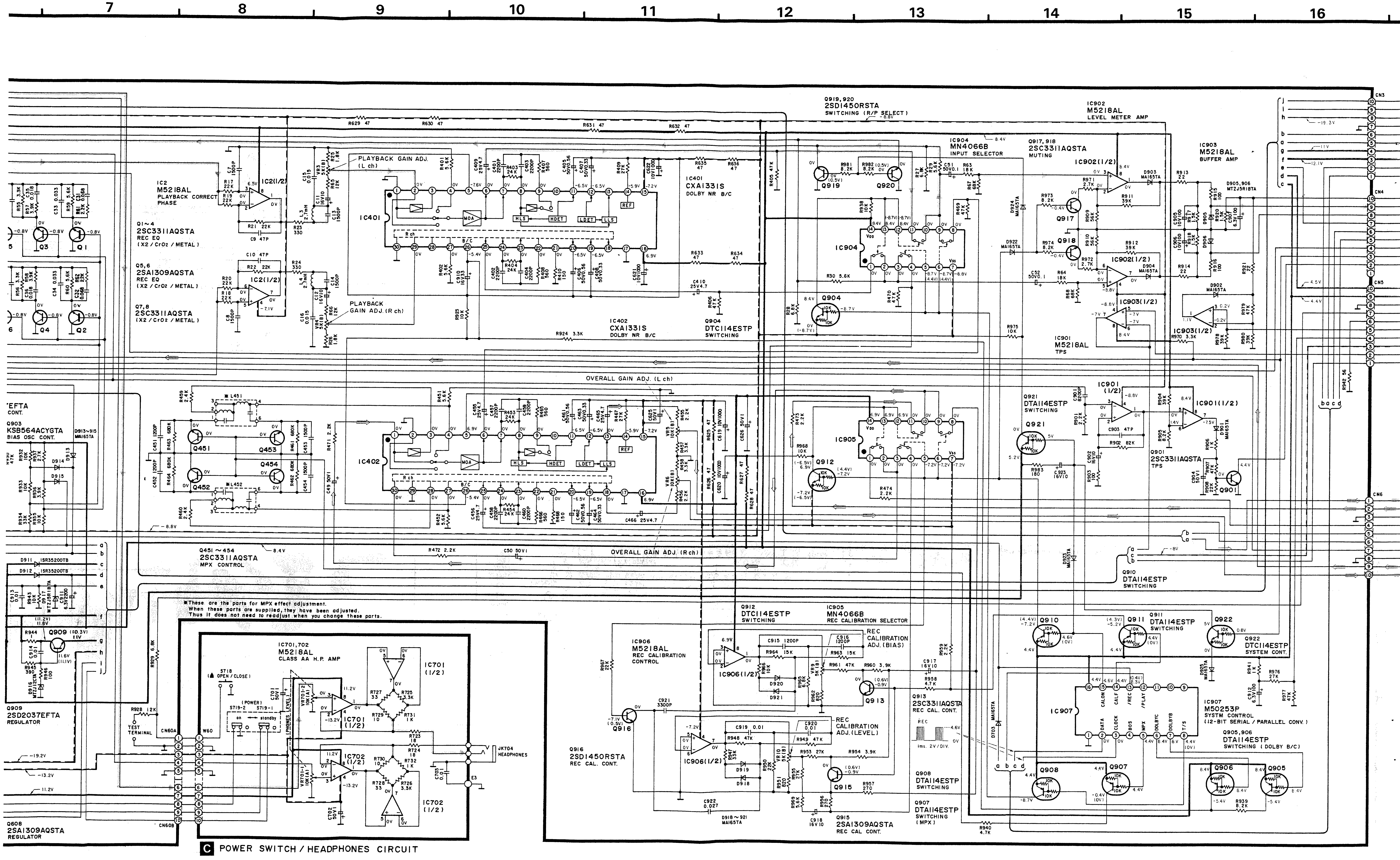
Ref. No.	Production Part No.	Supply Part No.
IC2, 701, 702, 901, 902, 903, 906	M5218AL	M5218L
IC203	SN74LS74AMEL	SN74LS74AM

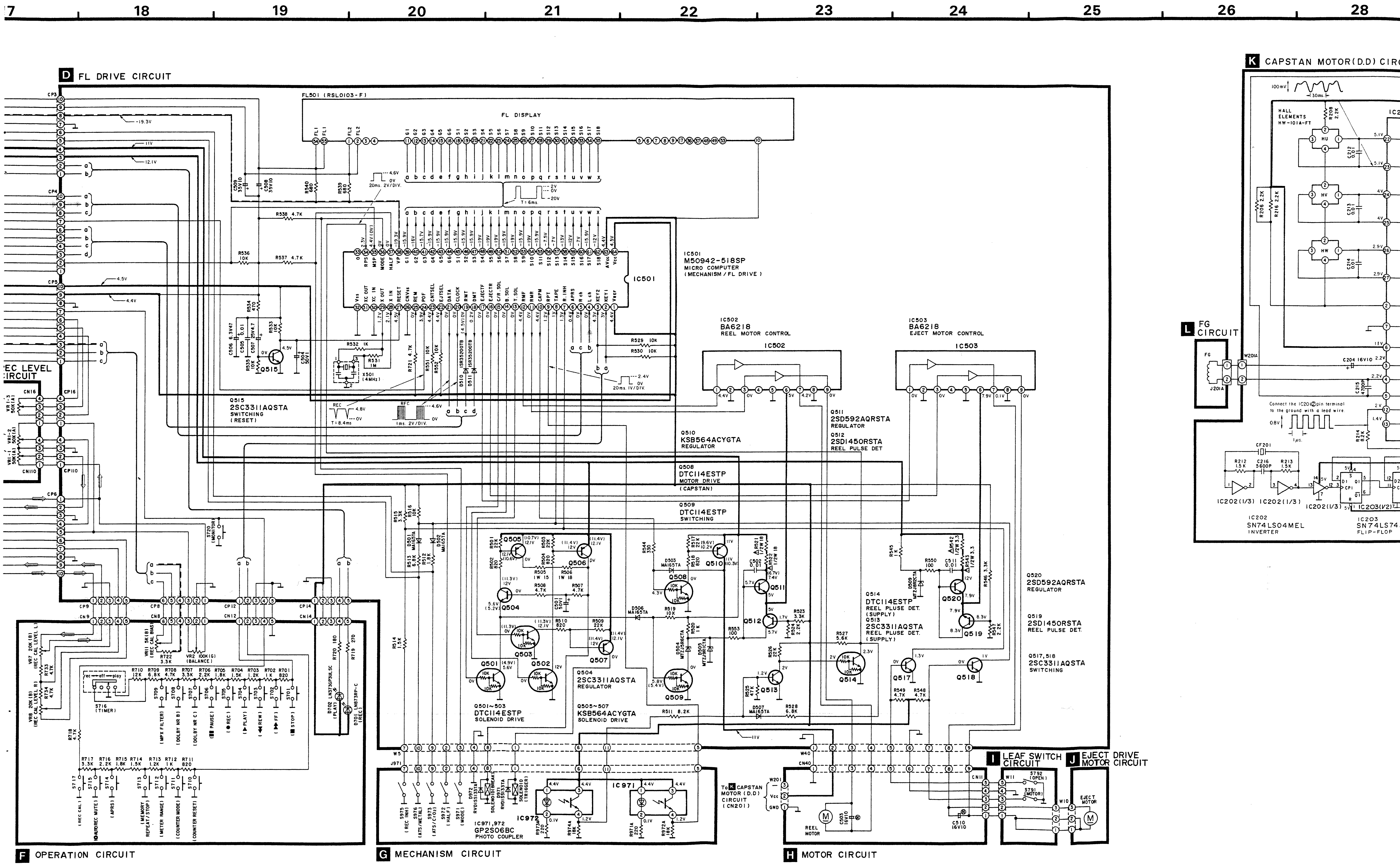
∗ Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

∗Cover the parts boxes made of plastics with aluminum foil.
∗Ground the soldering iron.
∗Put a conductive mat on the work table.
∗Do not touch the legs of IC or LSI with the fingers directly.

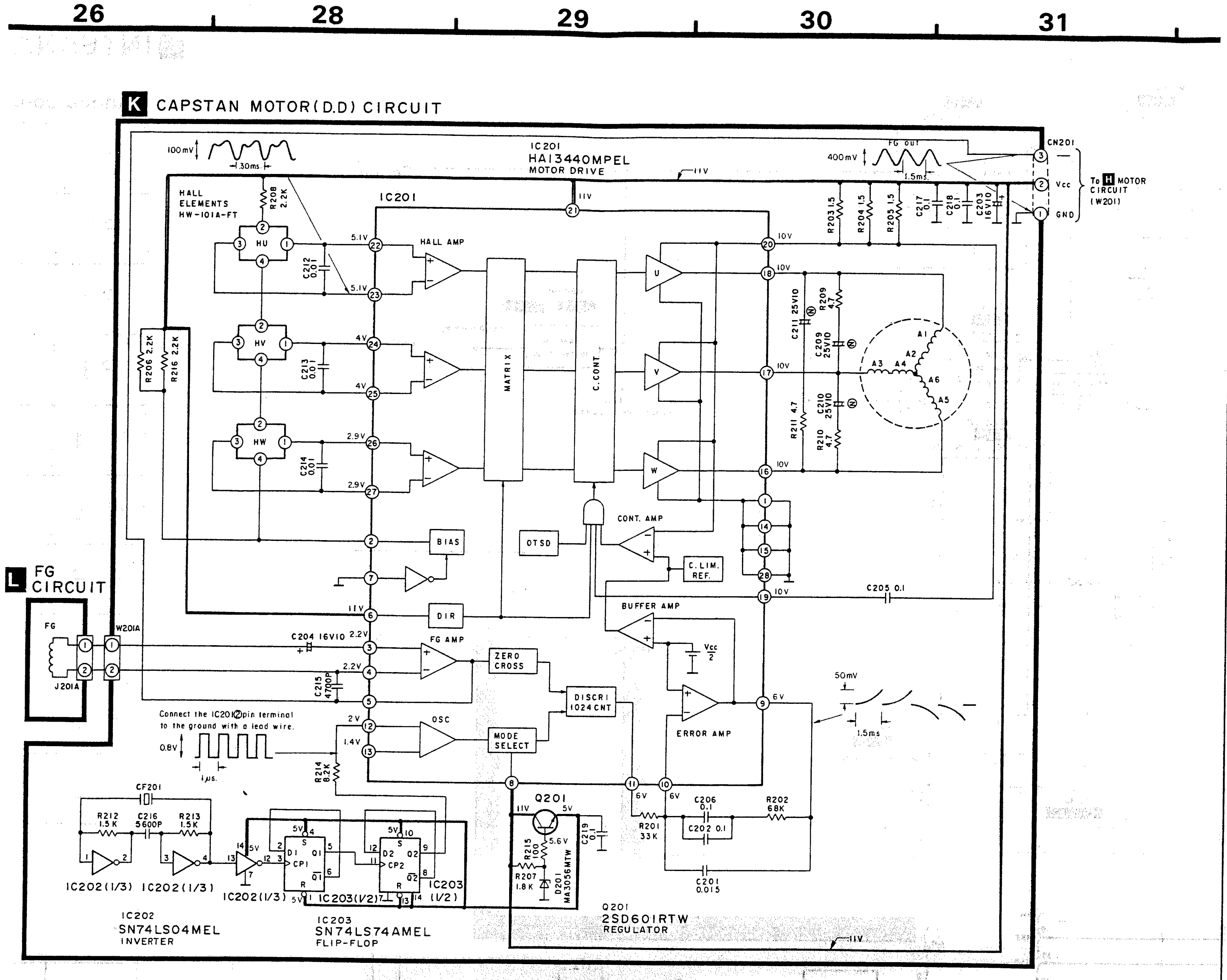

1
2
3
4
5
6
7
A
B
C
D
E
F
G
A MAIN CIRCUIT
LINE OUT
L ch
R ch
LINE IN
PLAYBACK HEAD
RECORD HEAD
ERASE HEAD
IC1
AN7351K
PLAYBACK EQ/MIC AMP
LINE P.B MUTE
CUE/REV MODE
CH2 BUFF
CH1 BUFF
AMP REC
REC MUTE
IC2
M5218AL
PLAYBACK CORREC
PHASE
Q1~4
2SC3311AQSTA
REC EQ
(X2 / CrO2 / METAL)
Q5,6
2SA1309AQSTA
REC EQ
(X2 / CrO2 / METAL)
Q7,8
2SC3311AQSTA
(X2 / CrO2 / METAL)
AC BIAS TRAP ADJ. (R ch)
AC BIAS TRAP ADJ. (Rch) TEST POINT
AC BIAS TRAP ADJ. (L ch) TEST POINT
AC BIAS TRAP ADJ. (L ch)
TP3
TP4
TP5
TP6
TP1
HX PRO ADJ. (L ch) TEST POINT
HX PRO ADJ. (L ch)
HX PRO ADJ. (R ch)
HX PRO ADJ. (R ch) TEST POINT
IC301
ABSO DET.
PEAK DET.
VCA
REGU-LATOR
IC301
UPC1297CA
DOLBY HX PRO
OVERALL FREQUENCY RESPONSE ADJ. (R ch)
OVERALL FREQUENCY RESPONSE ADJ. (L ch)
Q301,302
2SC3311AQSTA
BIAS OSC
Q303
2SD2037EFTA
BIAS OSC CONT.
Q903
KSB564ACYGTA
BIAS OSC CONT.
Q304
2SC3311AQSTA
BIAS OSC CONT.
Q902
DTC114ESTP
SWITCHING
Q909
2SD2037EFTA
REGULATOR
Q609
2SB1357EFTA
ERASE CURRENT CONT.
TEST TERMINAL
B POWER SUPPLY CIRCUIT
T1
AC IN
(230 - 240V)
(50 / 60 Hz)
JK701
D601~606, 614
1SR35200TB
Q601
2SA1309AQSTA
STABILIZER
Q602
2SC3311AQSTA
STABILIZER
Q603
2SD2037EFTA
REGULATOR
Q604
2SB1357EFTA
REGULATOR
Q605
2SD2037EFTA
REGULATOR
Q606
KSB564ACYGTA
REGULATOR
Q607
2SC3311AQSTA
REGULATOR
Q608
2SA1309AQSTA
REGULATOR


7
8
9
10
11
12
13
14
15
16
IC2
M5218AL
PLAYBACK CORRECT
PHASE
Q1~4
2SC3311AQSTA
REC EQ
(X2 / CrO2 / METAL)
Q5,6
2SA1309AQSTA
REC EQ
(X2 / CrO2 / METAL)
Q7,8
2SC3311AQSTA
(X2 / CrO2 / METAL)
PLAYBACK GAIN ADJ.
(L ch)
PLAYBACK
GAIN ADJ. (R ch)
IC401
CXA1331S
DOLBY NR B/C
IC402
CXA1331S
DOLBY NR B/C
Q904
DTC114ESTP
SWITCHING
Q919,920
2SD1450RSTA
SWITCHING (R/P SELECT)
IC904
MN4066B
INPUT SELECTOR
Q917,918
2SC3311AQSTA
MUTING
IC902
M5218AL
LEVEL METER AMP
IC903
M5218AL
BUFFER AMP
D905,906
MTZJ5R1BTA
IC901
M5218AL
TPS
CN3
CN4
CN5
CN6
OVERALL GAIN ADJ. (L ch)
OVERALL GAIN ADJ. (R ch)
Q903
KSB564ACYGTA
BIAS OSC CONT.
D913~915
MA165TA
Q451~454
2SC3311AQSTA
MPX CONTROL
Q921
DTA114ESTP
SWITCHING
Q901
2SC3311AQSTA
TPS
Q910
DTA114ESTP
SWITCHING
D911 1SR35200TB
D912 1SR35200TB
Q909
2SD2037EFTA
REGULATOR
Q608
2SA1309AQSTA
REGULATOR
※These are the parts for MPX effect adjustment.
When these parts are supplied, they have been adjusted.
Thus it does not need to readjust when you change these parts.
IC701,702
M5218AL
CLASS AA H.P. AMP
S718
(▲ OPEN / CLOSE)
(POWER)
S719-2 S719-1
on standby
TEST
TERMINAL
CN60A
CN60B
W60
IC701
(1/2)
IC702
(1/2)
JK704
HEADPHONES
C POWER SWITCH / HEADPHONES CIRCUIT
IC906
M5218AL
REC CALIBRATION
CONTROL
Q912
DTC114ESTP
SWITCHING
IC905
MN4066B
REC CALIBRATION SELECTOR
REC
CALIBRATION
ADJ. (BIAS)
REC
CALIBRATION
ADJ. (LEVEL)
Q913
2SC3311AQSTA
REC CAL. CONT.
Q916
2SD1450RSTA
REC CAL. CONT.
Q915
2SA1309AQSTA
REC CAL CONT.
D918~921
MA165TA
Q908
DTA114ESTP
SWITCHING
Q907
DTA114ESTP
SWITCHING
(MPX)
Q911
DTA114ESTP
SWITCHING
Q922
DTC114ESTP
SYSTEM CONT.
IC907
M50253P
SYSTM CONTROL
(12-BIT SERIAL / PARALLEL CONV.)
Q905,906
DTA114ESTP
SWITCHING (DOLBY B/C)
1ms. 2V/DIV.


17
18
19
20
21
22
23
24
25
26
28
D FL DRIVE CIRCUIT
FL501 (RSL0103-F)
FL DISPLAY
IC501
M50942-518SP
MICRO COMPUTER
(MECHANISM / FL DRIVE)
IC502
BA6218
REEL MOTOR CONTROL
IC503
BA6218
EJECT MOTOR CONTROL
Q515
2SC3311AQSTA
SWITCHING
(RESET)
Q510
KSB564ACYGTA
REGULATOR
Q508
DTC114ESTP
MOTOR DRIVE
(CAPSTAN)
Q509
DTC114ESTP
SWITCHING
Q511
2SD592AQRSTA
REGULATOR
Q512
2SD1450RSTA
REEL PULSE DET
Q520
2SD592AQRSTA
REGULATOR
Q519
2SD1450RSTA
REEL PULSE DET.
Q517,518
2SC3311AQSTA
SWITCHING
Q514
DTC114ESTP
REEL PLUSE DET.
(SUPPLY)
Q513
2SC3311AQSTA
REEL PLUSE DET.
(SUPPLY)
Q504
2SC3311AQSTA
REGULATOR
Q505~507
KSB564ACYGTA
SOLENOID DRIVE
Q501~503
DTC114ESTP
SOLENOID DRIVE
IC971,972
GP2S06BC
PHOTO COUPLER
EC LEVEL
IRCUIT
F OPERATION CIRCUIT
G MECHANISM CIRCUIT
H MOTOR CIRCUIT
I LEAF SWITCH CIRCUIT
J EJECT DRIVE MOTOR CIRCUIT
K CAPSTAN MOTOR (D.D) CIRC
L FG CIRCUIT
To K CAPSTAN MOTOR (D.D) CIRCUIT (CN201)
REEL MOTOR
EJECT MOTOR
HALL ELEMENTS HW-101A-FT
Connect the IC201②pin terminal to the ground with a lead wire.
IC202 SN74LS04MEL INVERTER
IC203 SN74LS74 FLIP-FLOP
S716 (TIMER)
S709 (MPX FILTER)
S708 (DOLBY NR B)
S707 (DOLBY NR C)
S706 (PAUSE)
S705 (REC)
S704 (PLAY)
S703 (REW)
S702 (FF)
S701 (STOP)
S717 (REC CAL)
S715 (REC MUTE)
S714 (APRS)
S713 (MEMORY REPEAT/STOP)
S712 (METER RANGE)
S711 (COUNTER MODE)
S710 (COUNTER RESET)
S720 (MONITOR)
D702 LN373GP3LSC (PLAY)
D701 LN873RP-C (REC)
VR2 100K(G) (BALANCE)
VR1 5K(B) (REC CAL BIAS)
VR7 20K(B) (REC CAL LEVEL L)
VR8 20K(B) (REC CAL LEVEL R)
S975 (REC INH)
S976 (ATS/METAL)
S973 (ATS/CrO2)
S972 (HALF)
S971 (MODE)
D972 SOLENOID (BREAK)
D971 SOLENOID (TRIGGER)
IC971
IC972
X501 (4MHz)

K CAPSTAN MOTOR(D.D) CIRCUIT

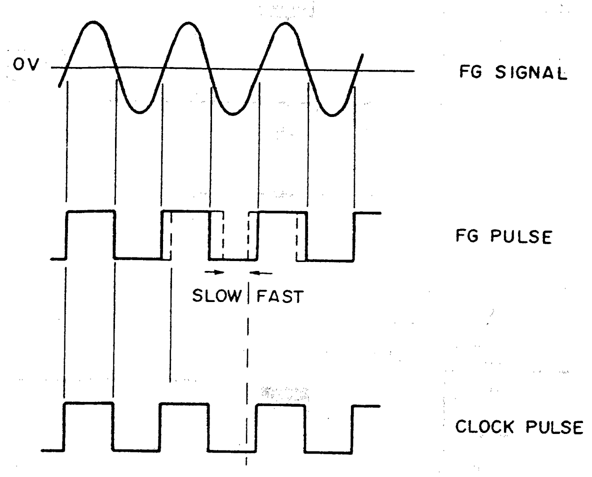
L FG CIRCUIT

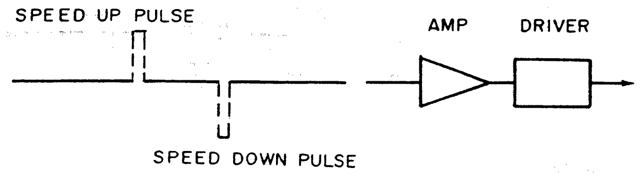

26
28
29
30
31
IC201
HA13440MPEL
MOTOR DRIVE
HALL ELEMENTS HW-101A-FT
HU
HV
HW
HALL AMP
MATRIX
C. CONT
U
V
W
BIAS
OTSD
CONT. AMP
C. LIM. REF.
DIR
FG AMP
ZERO CROSS
DISCRI 1024 CNT
BUFFER AMP
MODE SELECT
OSC
ERROR AMP
CN201
Vcc
GND
To H MOTOR CIRCUIT (W201)
FG
J201A
W201A
Connect the IC201② pin terminal to the ground with a lead wire.
IC202 SN74LS04MEL INVERTER
IC203 SN74LS74AMEL FLIP-FLOP
Q201 2SD601RTW REGULATOR
D201 MA3056MTW
CF201
R212 1.5K
C216 5600P
R213 1.5K
R206 2.2K
R216 2.2K
R208 2.2K
R214 8.2K
R215 100
R207 1.8K
R201 33K
R202 68K
C204 16V10
C215 4700P
C205 0.1
C206 0.1
C202 0.1
C201 0.015
100mV
30ms
400mV
1.5ms
50mV
0.8V
1µs
11V
10V
6V
5V
5.1V
4V
2.9V
2.2V
2V
1.4V

■TROUBLESHOOTING OF DIRECT DRIVE MOTOR

• OUTLINE OF THE DIRECT DRIVE MOTOR SYSTEM

The capstan motor is actuated by the DD motor digital servo system. The FG pulse is generated after the detection of the zero crosspoint, and the reference signal generated from the quartz oscillator is compared with this FG pulse. From this comparison, the accelerated and reduced speed pulses are generated, causing the driving coil to function.


OV
FG SIGNAL
FG PULSE
SLOW
FAST
CLOCK PULSE

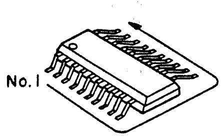
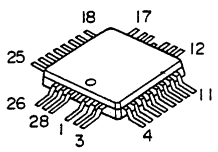
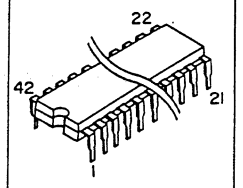
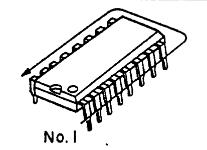
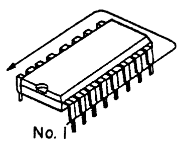
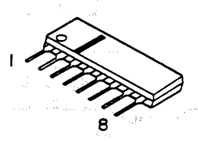
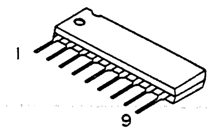
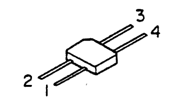
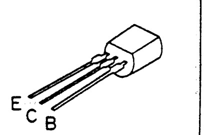
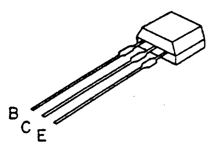
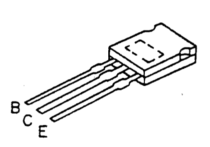
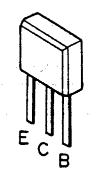
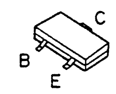
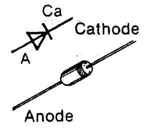
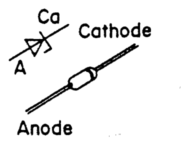
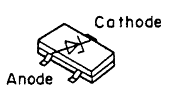
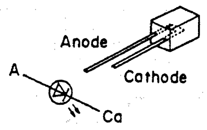

SPEED UP PULSE
SPEED DOWN PULSE
AMP
DRIVER

• TROUBLESHOOTING OF DIRECT DRIVE MOTOR

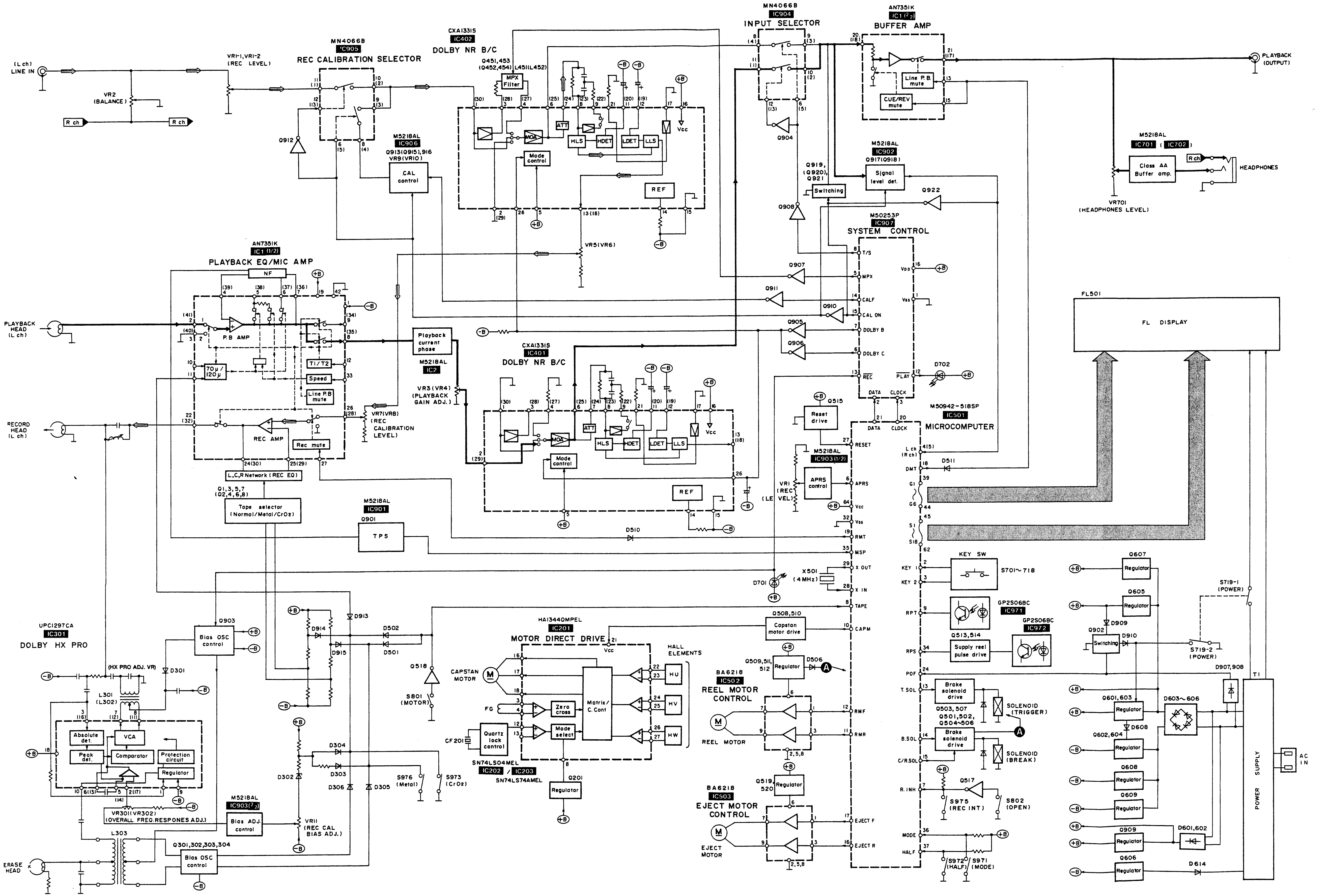
Problem	Possible Cause	Check Points
1. The motor does not rotate.	1. No power supply (+12V). 2. The Hall element has failed (Current does not flow). 3. The ceramic (or crystal) does not oscillate.	• Check the voltage applied to the connector. • Check the DC potential on IC201 pins ㉒~㉗. *Check the waveform of IC201 pin ⑫.
2. The motor does not rotate properly. (When pressed, it stops at certain angles. Sometimes it does not rotate even if power is ON.)	1. The coil is broken or not properly soldered. 2. Output of the Hall element is not proper.	*Check the conductance of the coil. If normal, the resistances between IC201 pins ⑯~⑰, ⑰~⑱, ⑯~⑱ will reach 20 ohms. • Check the waveform of IC201 pins ㉒~㉗.
3. The motor is out of control.	1. The FG coil is broken.	• Check the waveform of IC201 pin ⑤. • Check if the FG coil is broken.
4. Abnormal wow.	1. Same as those described for problem 2.	

Note: Check the points marked with an asterisk (*) by removing the DD motor control P.C.B. and then connecting IC201 pin ② to GND with a lead wire. (After the DD motor control P.C.B. is removed, current will start flowing through the coil, heating the IC.)

■TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

SN74LS04MEL 14 Pin SN74LS74AMEL 14 Pin  No. 1	HA13440MPEL  18 17 12 11 25 26 28 1 3 4	AN7351K  22 42 21 1
M50253P 16 Pin M50942-518SP 64 Pin  No. 1	 No. 1	MN4066B 14 Pin UPC1297CA 18 Pin CXA1331S 30 Pin
M5218AL  1 8	BA6218  1 9	GP2S06BC  2 1 3 4
2SD592AQRSTA KSB564ACYGTA  E C B	DTA114ESTP DTC114ESTP  B C E	2SB1357EFTA 2SD2037EFTA  B C E
 E C B	2SA1309AQSTA 2SC3311AQSTA 2SD1450RSTA	2SD601RTW  C B E
MA165TA RVD1SS133TA 1SR35200TB  Ca Cathode A Anode	 Ca Cathode A Anode	MTZJ5R1BTA MTZJ5R6CTA MTZJ6R2BTA MTZJ8R2CTA MTZJ9R1CTA MTZJ12CTA MTZJ20CTA MTZJ33DTA
MA3056-MTX  Cathode Anode	 Anode A Cathode Ca	LN373GP3ULSC LN873RP-C

■ BLOCK DIAGRAM


(L ch) LINE IN
VR2 (BALANCE)
R ch
VR1-1, VR1-2 (REC LEVEL)
MN4066B IC905 REC CALIBRATION SELECTOR
Q912
M5218AL IC906
Q913 (Q915), 916 VR9 (VR10)
CAL control
CXA1331S IC402 DOLBY NR B/C
Q451, 453 (Q452, 454) L451 (L452)
MPX Filter
Mode control
MOA
ATT
HLS
HDET
LDET
LLS
REF
VR5 (VR6)
Vcc
MN4066B IC904 INPUT SELECTOR
Q904
AN7351K IC1 (2/2) BUFFER AMP
Line P.B. mute
CUE/REV mute
PLAYBACK (OUTPUT)
M5218AL IC902
Q917 (Q918)
Signal level det.
Q919, (Q920), Q921
Switching
Q908
Q922
M5218AL IC701 (IC702)
Class AA Buffer amp.
R ch
HEADPHONES
VR701 (HEADPHONES LEVEL)
M50253P IC907 SYSTEM CONTROL
T/S
MPX
CALF
CAL ON
DOLBY B
DOLBY C
REC
PLAY
VDD
Vss
DATA
CLOCK
Q907
Q911
Q910
Q905
Q906
D702
AN7351K IC1 (1/2) PLAYBACK EQ/MIC AMP
NF
PLAYBACK HEAD (L ch)
P.B AMP
70μ / 120μ
T1/T2
Speed
Line P.B mute
REC AMP
Rec mute
RECORD HEAD (L ch)
Playback current phase
M5218AL IC7
VR3 (VR4) (PLAYBACK GAIN ADJ.)
VR7 (VR8) (REC CALIBRATION LEVEL)
CXA1331S IC401 DOLBY NR B/C
L, C, R Network (REC EQ)
Q1, 3, 5, 7 (Q2, 4, 6, 8)
Tape selector (Normal/Metal/CrO2)
M5218AL IC901
Q901
TPS
D510
FL501
FL DISPLAY
M50942-518SP IC501 MICROCOMPUTER
Q515
Reset drive
RESET
M5218AL IC903 (1/2)
APRS control
VR1 (REC LEVEL)
APRS
L ch (R ch)
DMT
D511
G1
G6
S1
S18
RMT
MSP
X OUT
X IN
X501 (4 MHz)
D701
TAPE
CAPM
KEY SW
S701~718
KEY 1
KEY 2
RPT
GP2S06BC IC971
Q513, 514
Supply reel pulse drive
GP2S06BC IC972
RPS
POF
T.SOL
Brake solenoid drive
SOLENOID (TRIGGER)
Q503, 507 Q501, 502, Q504~506
B.SOL
SOLENOID (BREAK)
C/R.SOL
R.INH
Q517
S975 (REC INT)
S802 (OPEN)
MODE
HALF
S972 (HALF)
S971 (MODE)
Q607
Regulator
Q605
Q902
D909
D910
S719-1 (POWER)
S719-2 (POWER)
D907, 908
Q601, 603
D603~606
D608
Q602, 604
Q608
Q609
Q909
D601, 602
Q606
D614
T1
POWER SUPPLY
AC IN
UPC1297CA IC301 DOLBY HX PRO
Q903
Bias OSC control
(HX PRO ADJ. VR)
D301
L301 (L302)
Absolute det.
VCA
Peak det.
Comparator
Protection circuit
Regulator
VR301 (VR302) (OVERALL FREQ. RESPONES ADJ.)
L303
ERASE HEAD
Q301, 302, 303, 304
Bias OSC control
M5218AL IC903 (2/2)
Bias ADJ control
VR11 (REC CAL BIAS ADJ.)
D913
D914
D915
D502
D501
Q518
S801 (MOTOR)
D304
D303
D302
D306
D305
S976 (Metal)
S973 (CrO2)
HA13440MPEL IC201 MOTOR DIRECT DRIVE
CAPSTAN MOTOR
FG
Zero cross
Mode select
Matrix / C. Cont
Quartz lock control
CF201
SN74LS04MEL IC202 / IC203 SN74LS74AMEL
Q201
HALL ELEMENTS
HU
HV
HW
Q508, 510
Capstan motor drive
Q509, 511, 512
D506
BA6218 IC502 REEL MOTOR CONTROL
REEL MOTOR
RMF
RMR
Q519, 520
BA6218 IC503 EJECT MOTOR CONTROL
EJECT MOTOR
EJECT F
EJECT R

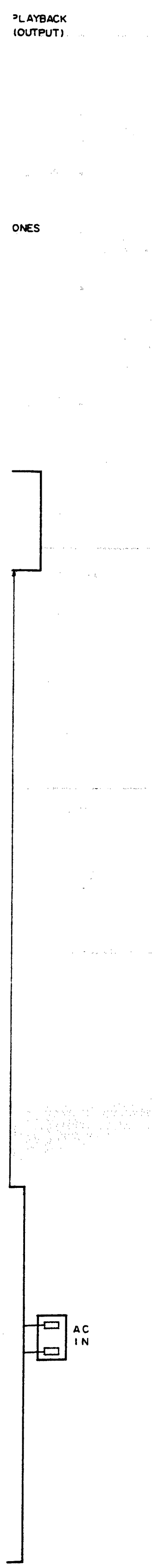
Notes:

- ➡ Playback signal
- ⇨ Recording signal

■ INTERN

• Anode co

P1
P2
P3
P 4
P 5
P 6
P 7
P 8
P 9
P10
P11
P12
P13
P14
P15
P16
P17
P18
P19


PLAYBACK (OUTPUT)
ONES
AC IN

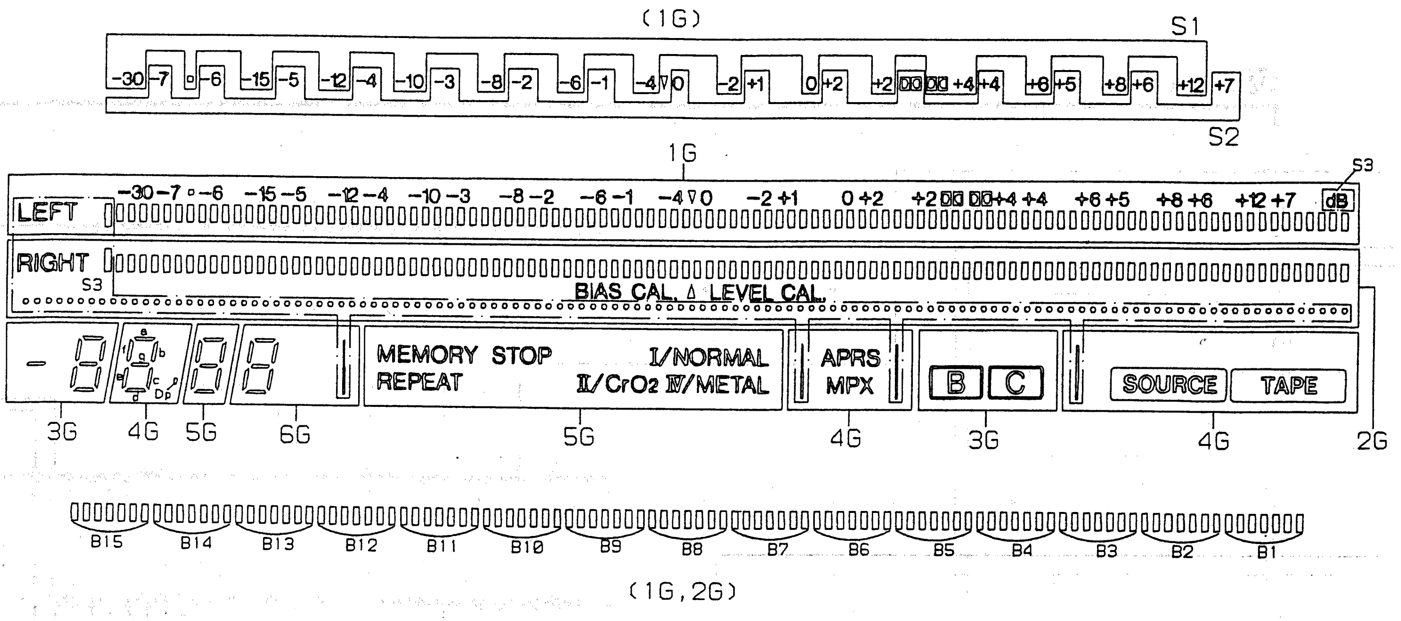
ack signal
rding signal

INTERNAL CONNECTION OF FL

- **Anode connection table**

	1G	2G	3G	4G	5G	6G
P1	S1	LEVEL CAL.	–	APRS	–	–
P2	S2	BIAS CAL.	–	–	–	–
P3	∇	Δ	–	–	–	–
P4	B1	B1	–	–	–	–
P5	B2	B2	–	–	MEMORY	–
P6	B3	B3	–	–	REPEAT	–
P7	B4	B4	–	TAPE	STOP	–
P8	B5	B5	B	SOURCE	–	–
P9	B6	B6	C	–	I/NORMAL	–
P10	B7	B7	–	MPX	II/CrO2	–
P11	B8	B8	▭	Dp	IV/METAL	–
P12	B9	B9	a	a	a	a
P13	B10	B10	b	b	b	b
P14	B11	B11	f	f	f	f
P15	B12	B12	g	g	g	g
P16	B13	B13	c	c	c	c
P17	B14	B14	e	e	e	e
P18	B15	B15	d	d	d	d
P19	S3	S3	–	S3	–	S3

- **Grid connection diagram**


(1G)
S1
S2
-30 -7 -6 -15 -5 -12 -4 -10 -3 -8 -2 -6 -1 -4 ∇ 0 -2 +1 0 +2 +2 +4 +4 +6 +5 +8 +6 +12 +7
1G
S3
LEFT
dB
RIGHT
S3
BIAS CAL. Δ LEVEL CAL.
a b c d e f g Dp
MEMORY STOP
REPEAT
I/NORMAL
II/CrO2 IV/METAL
APRS
MPX
B C
SOURCE TAPE
3G 4G 5G 6G 5G 4G 3G 4G 2G
B15 B14 B13 B12 B11 B10 B9 B8 B7 B6 B5 B4 B3 B2 B1
(1G,2G)

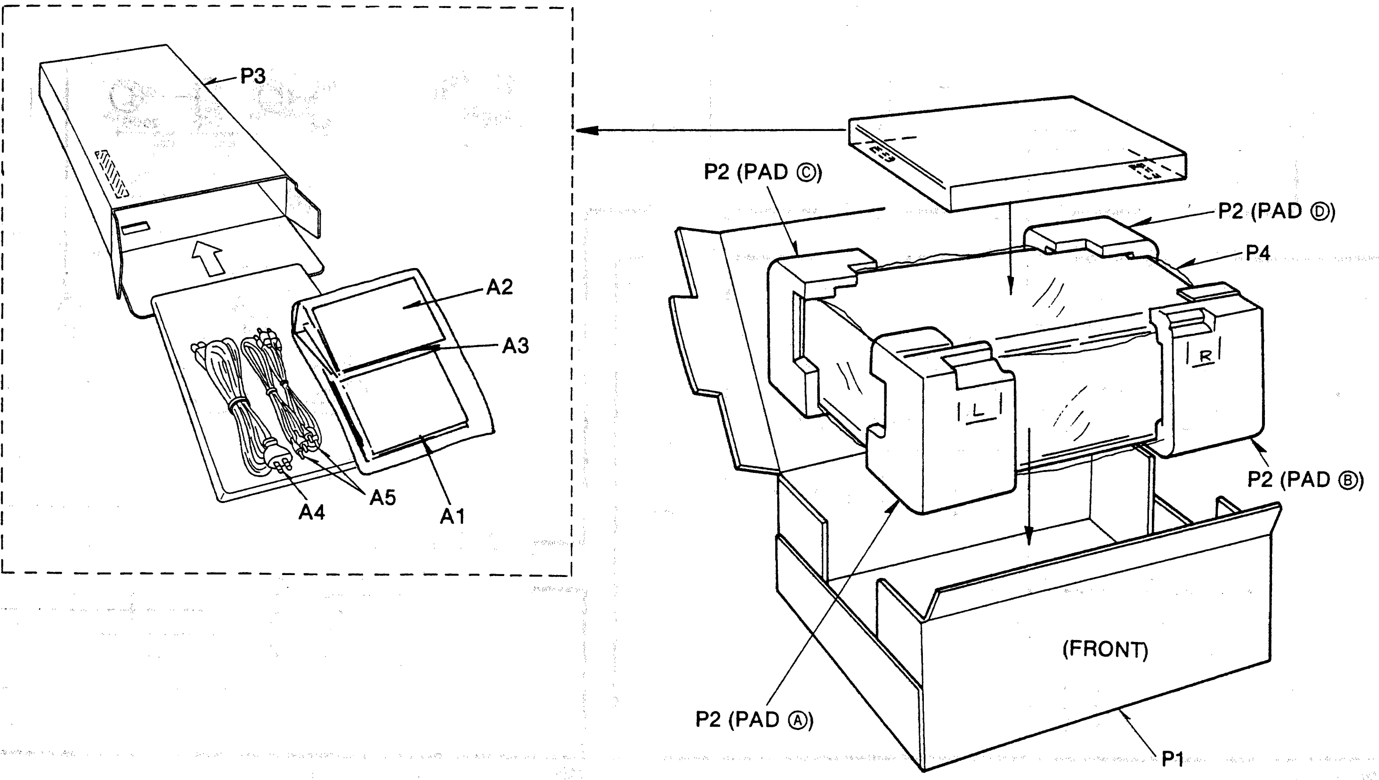
- **Pin connection**

PIN NO.	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	NP	NP	NP	NP	NC	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NC	6G	5G	4G	3G	2G	1G	P19	NP	NP	NP	NP	NP	NP	NP	F1	F1

PIN NO.	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
CONNECTION	F2	F2	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

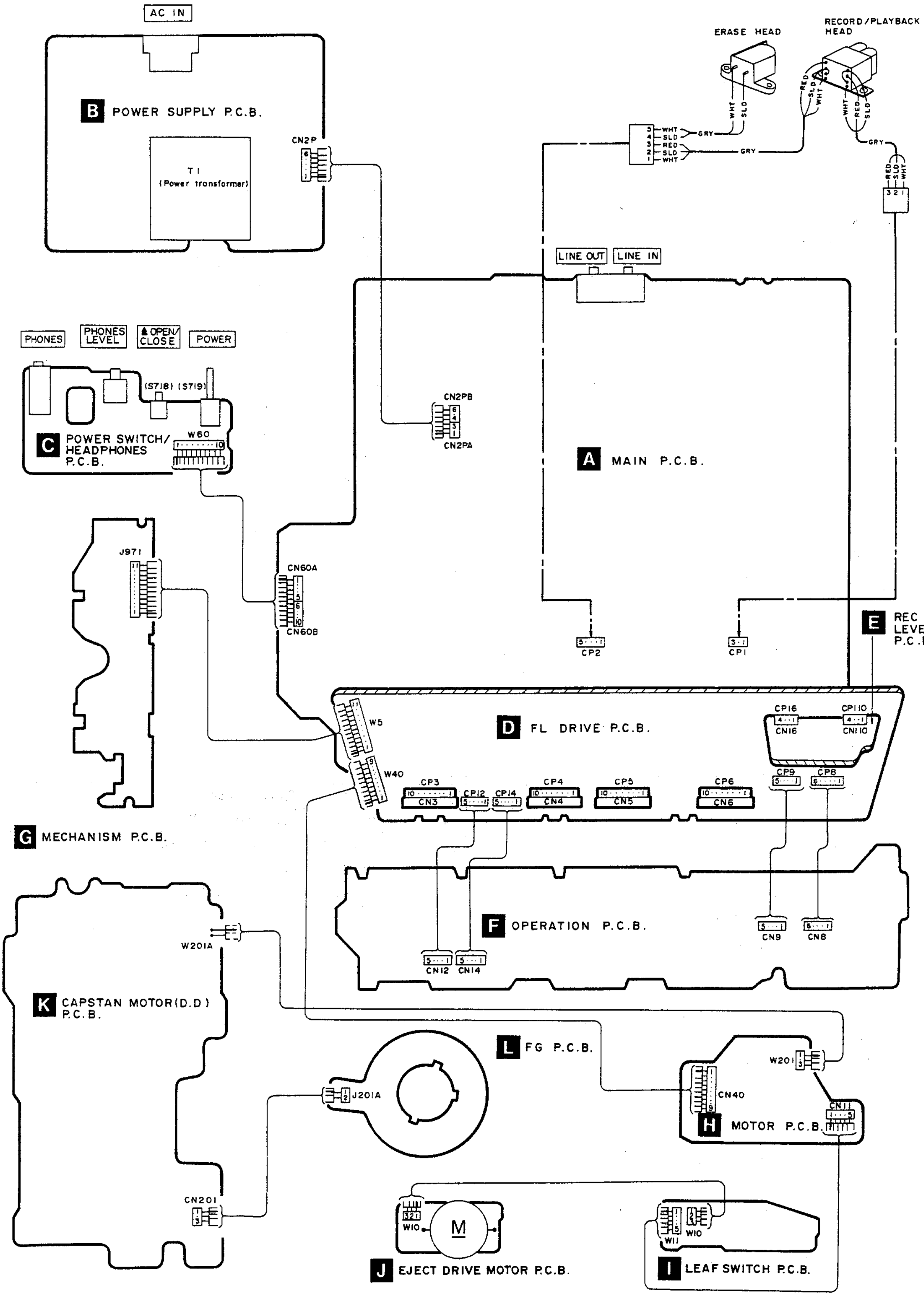
1) F1, F2.................... Filament
2) NP.......................... No pin
3) NC.......................... No connection
4) 1G~6G.................. Grid

PACKING


P3
A2
A3
A4
A5
A1
P2 (PAD Ⓒ)
P2 (PAD Ⓓ)
P4
P2 (PAD Ⓑ)
(FRONT)
P2 (PAD Ⓐ)
P1

<PAD Ⓐ, Ⓑ, Ⓒ, Ⓓ, Part No.: RPN0366-1>

WIRING CONNECTION DIAGRAM


AC IN
B POWER SUPPLY P.C.B.
T1 (Power transformer)
CN2P
ERASE HEAD
RECORD/PLAYBACK HEAD
WHT
SLD
RED
GRY
5 4 3 2 1
3 2 1
LINE OUT
LINE IN
PHONES
PHONES LEVEL
▲ OPEN/CLOSE
POWER
(S718)
(S719)
C POWER SWITCH/ HEADPHONES P.C.B.
W60
CN2PB
CN2PA
A MAIN P.C.B.
J971
CN60A
CN60B
CP2
CP1
E REC LEVEL P.C.B.
D FL DRIVE P.C.B.
W5
W40
CP16
CN16
CP110
CN110
CP3
CN3
CP12
CP14
CP4
CN4
CP5
CN5
CP6
CN6
CP9
CP8
G MECHANISM P.C.B.
F OPERATION P.C.B.
CN12
CN14
CN9
CN8
W201A
K CAPSTAN MOTOR(D.D) P.C.B.
L FG P.C.B.
J201A
W201
CN40
CN11
H MOTOR P.C.B.
CN201
W10
M
J EJECT DRIVE MOTOR P.C.B.
W11
W10
I LEAF SWITCH P.C.B.

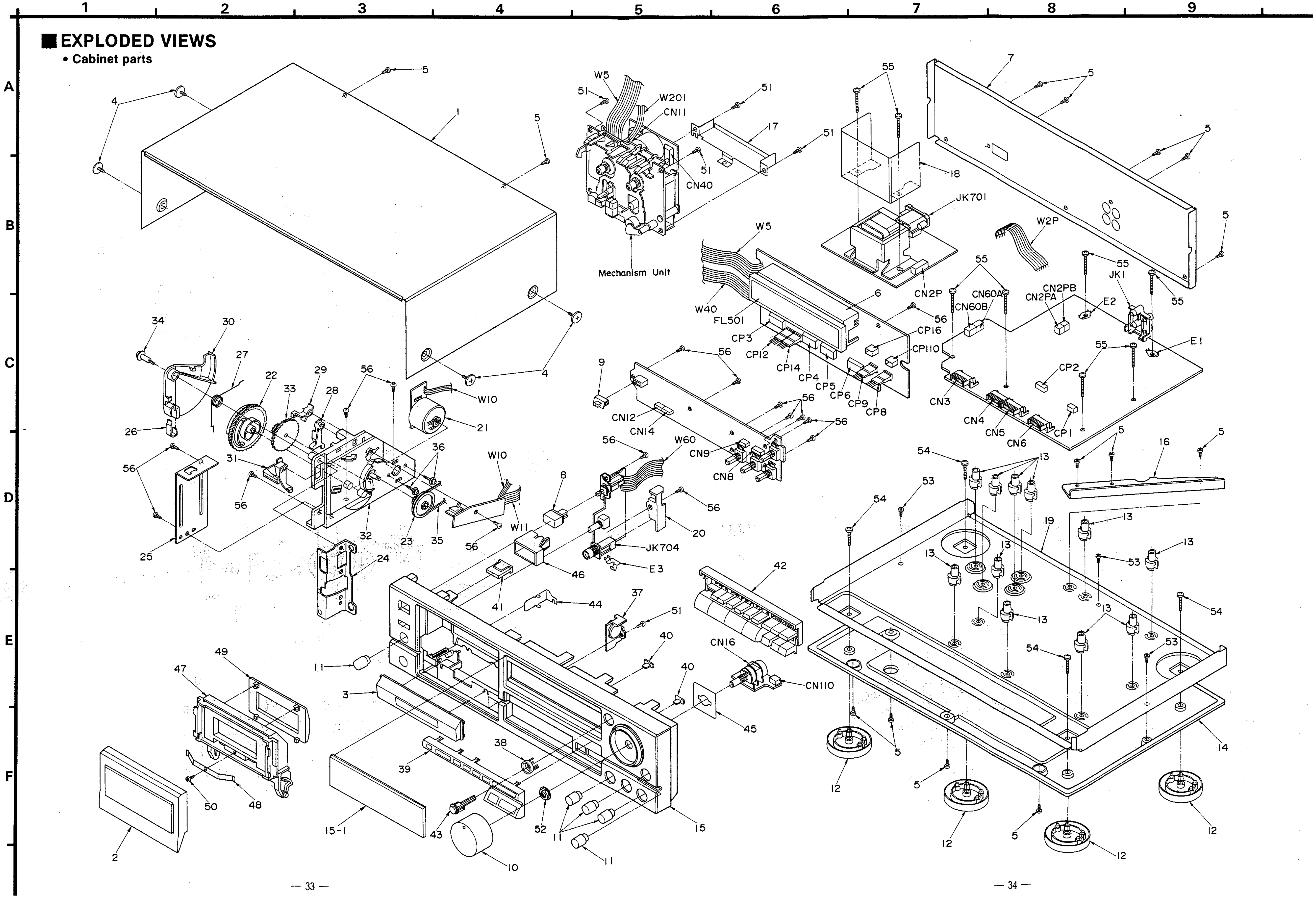
REPLACEMENT PARTS LIST

Notes : * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RKM0036-K	CABINET	
2	RYF0146A-K	CASSETTE LID	
3	RYQ0070-K	FRONT ORNAMENT	
4	SNE2129-1	SCREW	
5	XTBS3+8JFZ1	SCREW	
6	RMN0141	FL HOLDER	
7	RGR0128A-E1	REAR PANEL	(EG)
7	RGR0128A-F	REAR PANEL	(EB)
8	RGU0030	BUTTON, POWER SWITCH	
9	RGV0080-K	KNOB, TIMER	
10	RGW0033-K1	KNOB, REC LEVEL	
11	RGW0110-K	KNOB, BAL./BIAS/H.P./REC.CAL	
12	RKA0009-1	FOOT	
13	RKQ0089	P.C.B. HOLDER	
14	RKU0009-2	BOTTOM BOARD	
15	RFKGSBX707EB	FRONT PANEL ASS'Y	
15-1	RKW0171B-K	TRANSPARENT PLATE	
16	RMA0517	BRACKET, BOTTOM CHASSIS	
17	RMC0137	SHIELD PLATE, MECH. UNIT	
18	RMC0139	SHIELD PLATE, P.TRANSFORMER	
19	RMK0026-6	BOTTOM CHASSIS	
20	RMN0140	ORNAMENT, HEADPHONES	
21	RFKPSB755E-K	EJECT DRIVE MOTOR ASS'Y	
22	RDG0080	DRIVE GEAR	
23	RDG0081	PULLEY GEAR	
24	RMA0146-1	LOADING ANGLE	
25	RMA0242	ANGLE	
26	RMC0039	BRACKET	
27	RME0039	OPEN SPRING	
28	RML0110	LEAF SWITCH LEVER(B)	
29	RML0111	LEAF SWITCH LEVER(C)	
30	RML0112	DRIVE SELECTOR LEVER	
31	RML0113	LEAF SWITCH LEVER(A)	
32	RFKNSB755EDK	LOADING BASE ASS'Y	
33	SFUGF01N02	INTERMEDIATE GEAR	
34	SHDD8	SCREW	
35	SMBD7-2	BELT	
36	XYN26+F6	SCREW	
37	RFKNSDN7AK	DAMPER GEAR ASS'Y	
38	RGK0407-A	ORNAMENT, MONITOR BUTTON	
39	RGK0411-K	ORNAMENT, OPERATION BUTTON	
40	RGL0030	PANEL LIGHT	
41	RGU0195	BUTTON, OPEN/CLOSE	
42	RGU0619-K	BUTTON, OPERATION	
43	RGU0620-K	BUTTON, MONITOR	
44	RMA0535	HOLDER ANGLE	
45	RMC0056-1	SHIELD PLATE, REC LEVEL	
46	RMR0185	BUTTON SPACER	
47	RFKNSBX707EB	CASSETTE HOLDER ASS'Y	
48	RMC0038	HALF SPRING	
49	RMQ0072	HALF STABILIZER	
50	XTB3+6J	SCREW	
51	XTB3+10JFZ	SCREW	
52	SNE4021-1	NUT	
53	XTB3+10GFZ	SCREW	
54	XTB3+16CFN	SCREW	
55	XTB3+20JFZ	SCREW	
56	XTB3+8JFZ	SCREW	
		PACKING MATERIAL	
P1	RPG0994	CARTON BOX	
P2	RPN0366-1	PAD	
P3	SPSD152	ACCESSORIES BOX	
P4	SPP756	PROTECTION COVER	
		ACCESSORIES	
A1	RFKSSBX707EG	INSTRUCTION MANUAL ASS'Y	(EG)
A1	RQT1192-B	INSTRUCTION MANUAL ASS'Y	(EB)
A2	RQA0013	WARRANTY CARD	
A3	RQCB0169	SERVICENTER LIST	
A4	SFDAC05E03	AC POWER SUPPLY CORD	(EG) ⚠
A4	SJA193	AC POWER SUPPLY CORD	(EB) ⚠
A5	SJP2249-3	STEREO CONNECTION CABLE	

EXPLODED VIEWS

- **Cabinet parts**


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
Mechanism Unit
W5
W201
CN11
CN40
W40
FL501
CP3
CP12
CP14
CP4
CP5
CP6
CP9
CP8
CP16
CP110
JK701
W2P
CN2P
CN60A
CN60B
CN2PA
CN2PB
JK1
E1
E2
CP2
CN3
CN4
CN5
CN6
CP1
CN12
CN14
CN9
CN8
W60
W10
W11
JK704
E3
CN16
CN110
10
11
12
13
14
15
15-1
16
17
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19
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22
23
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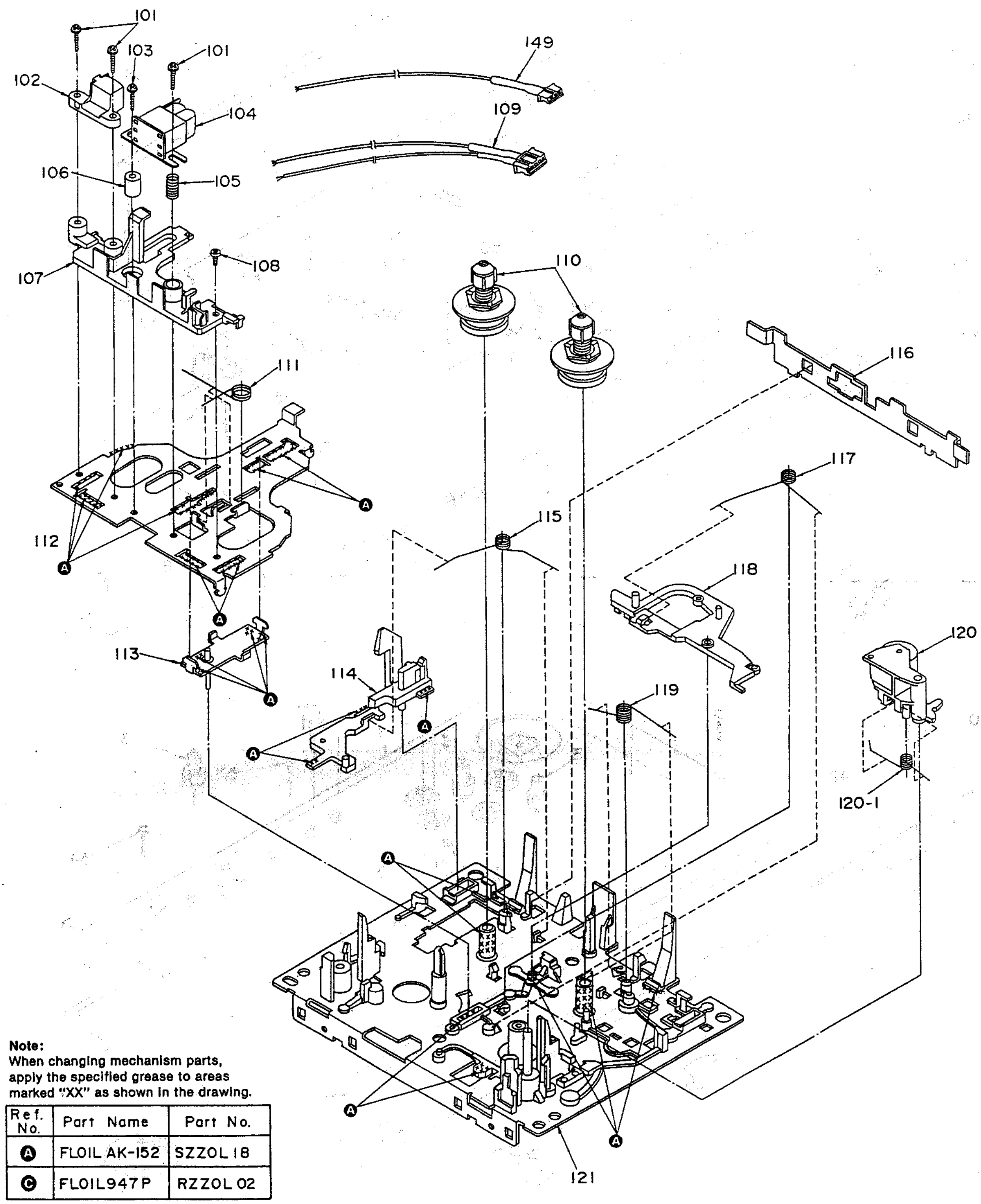
1 2 3 4 5 6 7 8 9

• Mechanical parts

(Top view)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120-1
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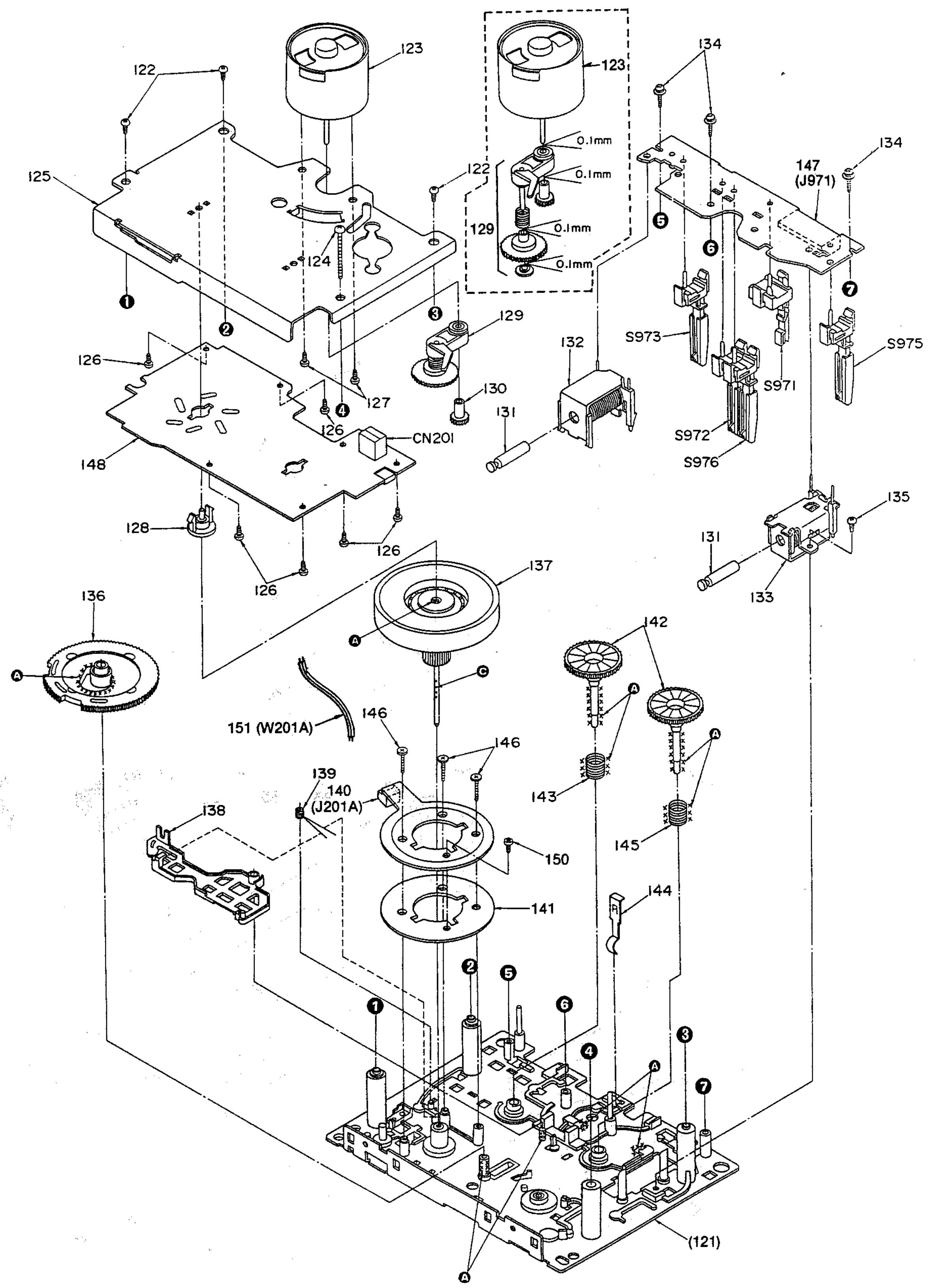
A

Note:
When changing mechanism parts, apply the specified grease to areas marked "XX" as shown in the drawing.

Ref. No.	Part Name	Part No.
A	FLOIL AK-152	SZZOL 18
C	FLOIL947P	RZZOL 02

(Bottom view)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123
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0.1mm
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134
134
125
122
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(J971)
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127
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130
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S973
S975
S971
S972
S976
CN201
131
148
126
128
126
126
131
133
135
136
137
142
A
C
151 (W201A)
146
146
139
140
(J201A)
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144
(121)

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Remarks
		MECHANISM PARTS LIST	
101	QHQ1361A	SCREW	
102	SJH96-1	E HEAD	
103	RHE5201ZA	SCREW	
104	RBR4CY009-C	R/P HEAD	
105	QBC1278A	HEAD SPRING	
106	RMX0014	SPACER	
107	RMR0184	HEAD SPACER	
108	XTN2+5F	SCREW	
109	REX0092-1	LEAD WIRE BLOCK	
110	RXR0009	REEL TABLE	
111	RUW139ZA	HEAD BASE SPRING	
112	RMA0047A-1	HEAD BASE	
113	RXQ0078	MAIN ROD ASS'Y	
114	RMM0012-2	EJECT ROD (L)	
115	RME0018-1	SPRING, EJECT ROD (L)	
116	RML0069-1	LEVER	
117	RME0020	BRAKE SPRING	
118	RML0040-2	BRAKE LEVER	
119	RUW142ZA	SPRING	
120	RXP0004	PINCH ROLLER ARM (F)	
120-1	RUW140ZC	SPRING, PINCH ROLLER ARM (F)	
121	RFKRSB555E-K	CHASSIS ASS'Y	
122	XTN26+7J	SCREW	
123	MMN-6F4RA88	REEL MOTOR	
124	XTN26+26F	SCREW	
125	RMA0048A	FLYWHEEL PLATE	
126	XTN2+3F	SCREW	
127	XSN26+3	SCREW	
128	RMR0141	THRUST BEARING	
129	RXG0009	IDLE GEAR ASS'Y	
130	RDG0034	REEL MOTOR GEAR	
131	RUB428ZE	MOVING IRON CORE	
132	RSJ0003	SOLENOID	
133	RXQ0011	BLAKE SOLENOID	
134	XTW2+8S	SCREW	
135	XTN26+4F	SCREW	
136	RDG0030	MAIN GEAR	
137	RXF0008	FLYWHEEL	
138	RML0037	TRIGGER LEVER	
139	RUW147ZA	TRIGGER LEVER SPRING	
140	RJS2T7ZA	CONNECTOR (2P), J201A	
141	RMQ0037	FG YOKE	
142	RXG0003	REEL TABLE GEAR	
143	RUQ112ZA	SPRING	
144	RUS609ZC	TAPE PRESSURE SPRING	
145	RUQ111ZB	SPRING	
146	RHE5204ZB	SCREW	
147	RJS11T7ZA	CONNECTOR (11P), J971	
148	REP0268C	STATER P.C.B. ASS'Y	
149	REX0093-2	LEAD WIRE BLOCK	
150	XQN2+AF3	SCREW	
151	RWJ0202090XX	FLAT CABLE (2P), W201A	

REPLACEMENT PARTS LIST

Notes : * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC1	AN7351K	PLAYBACK/REC AMP	
IC2	M5218L	PLAYBACK CORRECT PHASE	
IC201	HA13440MPEL	MOTOR DRIVE	
IC202	SN74LS04MEL	INVERTER	
IC203	SN74LS74AM	FLIP-FLOP	
IC301	UPC1297CA	DOLBY HX PRO	
IC401, 402	CXA1331S	DOLBY B/C NR	
IC501	M50942-518SP	MICROCOMPUTER	
IC502	BA6218	REEL MOTOR DRIVE	
IC503	BA6218	EJECT MOTOR DRIVE	
IC701, 702	M5218L	Class AA:H.P.AMP	
IC901	M5218L	TPS	
IC902	M5218L	LEVEL METER AMP	
IC903	M5218L	BUFFER AMP	
IC904	MN4066B	INPUT SELECTOR	
IC905	MN4066B	REC CALIBRATION SELECTOR	
IC906	M5218L	REC CALIBRATION CONTROL	
IC907	M50253P	SYSTEM CONTROL	
IC971, 972	GP2S06BC	PHOTO COUPLER	
		TRANSISTOR(S)	
Q1-4	2SC3311A-Q	TRANSISTOR	
Q5, 6	2SA1309A-R	TRANSISTOR	
Q7, 8	2SC3311A-Q	TRANSISTOR	
Q201	2SD601R	TRANSISTOR	
Q301, 302	2SC3311A-Q	TRANSISTOR	
Q303	2SD2037EFTA	TRANSISTOR	
Q304	2SC3311A-Q	TRANSISTOR	
Q451-454	2SC3311A-Q	TRANSISTOR	
Q501-503	DTC114ESTP	TRANSISTOR	
Q504	2SC3311A-Q	TRANSISTOR	
Q505-507	KSB564ACYGTA	TRANSISTOR	
Q508, 509	DTC114ESTP	TRANSISTOR	
Q510	KSB564ACYGTA	TRANSISTOR	
Q511	2SD592ANCQ	TRANSISTOR	
Q512	2SD1450RSTA	TRANSISTOR	
Q513	2SC3311A-Q	TRANSISTOR	
Q514	DTC114ESTP	TRANSISTOR	
Q515	2SC3311A-Q	TRANSISTOR	
Q517, 518	2SC3311A-Q	TRANSISTOR	
Q519	2SD1450RSTA	TRANSISTOR	
Q520	2SD592ANCQ	TRANSISTOR	
Q601	2SA1309A-R	TRANSISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
Q602	2SC3311A-Q	TRANSISTOR	
Q603	2SD2037EFTA	TRANSISTOR	
Q604	2SB1357EFTA	TRANSISTOR	
Q605	2SD2037EFTA	TRANSISTOR	
Q606	KSB564ACYGTA	TRANSISTOR	
Q607	2SC3311A-Q	TRANSISTOR	
Q608	2SA1309A-R	TRANSISTOR	
Q609	2SB1357EFTA	TRANSISTOR	
Q901	2SC3311A-Q	TRANSISTOR	
Q902	DTC114ESTP	TRANSISTOR	
Q903	KSB564ACYGTA	TRANSISTOR	
Q904	DTC114ESTP	TRANSISTOR	
Q905-908	DTA114ESTP	TRANSISTOR	
Q909	2SD2037EFTA	TRANSISTOR	
Q910, 911	DTA114ESTP	TRANSISTOR	
Q912	DTC114ESTP	TRANSISTOR	
Q913	2SC3311A-Q	TRANSISTOR	
Q915	2SA1309A-R	TRANSISTOR	
Q916	2SD1450RSTA	TRANSISTOR	
Q917, 918	2SC3311A-Q	TRANSISTOR	
Q919, 920	2SD1450RSTA	TRANSISTOR	
Q921	DTA114ESTP	TRANSISTOR	
Q922	DTC114ESTP	TRANSISTOR	
		DIODE(S)	
D201	MA3056-MTX	DIODE	
D301	MA165	DIODE	
D302	MTZJ5R6CTA	DIODE	
D303-306	MA165	DIODE	
D501-503	MA165	DIODE	
D504	MTZJ5R6CTA	DIODE	
D505	MTZJ9R1CTA	DIODE	
D506, 507	MA165	DIODE	
D509	MTZJ8R2CTA	DIODE	
D510, 511	1SR35200TB	DIODE	
D601-606	1SR35200TB	DIODE	⚠
D607, 608	MA165	DIODE	
D609, 610	MTZJ9R1CTA	DIODE	
D611	MTZJ6R2BTA	DIODE	
D612	MTZJ20CTA	DIODE	
D613	MTZJ33DTA	DIODE	
D614	1SR35200TB	DIODE	⚠
D701	LN873RP-C	L.E.D.	
D702	LN373GP3ULSC	L.E.D.	
D703	MA165	DIODE	
D901-904	MA165	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D905, 906	MTZJ5R1BTA	DIODE	
D907, 908	MA165	DIODE	⚠
D909, 910	MA165	DIODE	
D911, 912	1SR35200TB	DIODE	⚠
D913-915	MA165	DIODE	
D916	MTZJ12CTA	DIODE	
D917	MTZJ5R1BTA	DIODE	
D918-925	MA165	DIODE	
D971, 972	RVD1SS133TA	DIODE	
		VARIABLE RESISTOR(S)	
VR1	EWGU2A029A54	REC. LEVEL CONTROL	
VR2	EVJ02SFA5G15	BALANCE CONTROL	
VR3, 4	EVNDXAA00B53	PLAYBACK GAIN ADJ.	
VR5, 6	EVNDXAA00B14	OVERALL GAIN ADJ.	
VR7, 8	EVJ02KFA5B24	REC. CALIBRATION	
VR9, 10	EVNDXAA00B53	CALIBRATION LEVEL ADJ.	
VR11	EVJ02KFA5B53	BIAS CURRENT ADJ.	
VR301, 302	EVNDXAA00B14	OVERALL FREQ. ADJ.	
VR701	EVU57A064A14	HEADPHONES CONTROL	
		COIL(S)	
L1, 2	RLZ0003	COIL(AC BIAS TRAP ADJ.)	
L3-6	SLQX272-1YT	COIL	
L301, 302	SL09B1-Z	COIL(HX PRO ADJ.)	
L303	SL09B4-K	COIL	
L451, 452	QLM9Z10K	COIL	
		TRANSFORMER(S)	
T1	RTP1K4E014-V	POWE TRANSFORMER	⚠
		OSILLATOR(S)	
CF201	RSXA3M74S01	CRYSTAL OSILLATOR	
		FILTER(S)	
X501	EF0GC4004A4	CERAMIC FILTER(4MHz)	
		DISPLAY TUBE(S)	
FL501	RSL0103-F	DISPLAY TUBE	
		SWITCH(ES)	
S701	EVQ21405R	STOP	
S702	EVQ21405R	FF	
S703	EVQ21405R	REW	
S704	EVQ21405R	PLAY	

Ref. No.	Part No.	Part Name & Description	Remarks
S705	EVQ21405R	REC	
S706	EVQ21405R	PAUSE	
S707	EVQ21405R	DOLBY NR C	
S708	EVQ21405R	DOLBY NR B	
S709	EVQ21405R	MPX FILTER	
S710	EVQ21405R	COUNTER RESET	
S711	EVQ21405R	COUNTER MODE	
S712	EVQ21405R	METER RANGE	
S713	EVQ21405R	MEMORY(REPEAT/STOP)	
S714	EVQ21405R	APRS	
S715	EVQ21405R	AUTO REC MUTE	
S716	SSS166	TIMER	
S717	EVQ21405R	REC CAL	
S718	EVQ21405R	OPEN/CLOSE	
S719	SSH1238	POWER	
S720	EVQ21405R	MONITOR(SOURCE/TAPE)	
S791	SSPD18-1	MOTOR, LOADING	
S792	SSPD18-1	OPEN, LOADING	
S971	RSH1A89ZB-U	MODE	
S972	RSH1A90YB-U	HALF	
S973	RSH1A90YB-U	ATS	
S975	RSH1A90YB-U	REC INHIBIT	
S976	RSH1A90YB-U	ATS	
		CONNECTOR(S) AND SOCKET(S)	
CN2P	SJT30643-V	CONNECTOR(6P)	
CN2PA	RJS1A1703	CONNECTOR(3P)	
CN2PB	RJS1A1703	CONNECTOR(3P)	
CN3-6	RJU003K010M1	SOCKET(10P)	
CN8	SJS50681BB	SOCKET(6P)	
CN9	SJS50581BB	SOCKET(5P)	
CN11	SJT30544-H	CONNECTOR(5P)	
CN12	SJS50581BB	SOCKET(5P)	
CN14	SJS50581BB	SOCKET(5P)	
CN16	RJU057W004	SOCKET(4P)	
CN40	RJS9T7ZA	CONNECTOR(9P)	
CN60A	RJS1A1705	CONNECTOR(5P)	
CN60B	RJS1A1705	CONNECTOR(5P)	
CN110	RJU057W004	SOCKET(4P)	
CN201	RJS3T4ZA	CONNECTOR(3P)	
CP1	RJP3G18ZA	CONNECTOR(3P)	
CP2	RJP5G18ZA	CONNECTOR(5P)	
CP3-6	RJT003K010M1	CONNECTOR(10P)	
CP8	SJT30648BB1	CONNECTOR(6P)	
CP9	SJT30548BB1	CONNECTOR(5P)	
CP12	SJT30548BB1	CONNECTOR(5P)	
CP14	SJT30548BB1	CONNECTOR(5P)	
CP16	RJT057W004	CONNECTOR(4P)	
CP110	RJT057W004	CONNECTOR(4P)	
		JACK(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
JK1	SJF3069N	TERMIANL BOARD	
JK701	SJS9236	AC INLET	⚠
JK704	SJJD19	JACK, HEADPHONES	
		FLAT CABLE(S)	
W2P	RWJ1806110QQ	FLAT CABLE(6P)	
W5	RWJ0211220KQ	FLAT CABLE(11P)	
W10	RWJ1803160KK	FLAT CABLE(3P)	

Ref. No.	Part No.	Part Name & Description	Remarks
W11	RWJ1805170KQ	FLAT CABLE(5P)	
W40	RWJ0209180KQ	FLAT CABLE(9P)	
W60	RWJ1810260KQ	FLAT CABLE(10P)	
W201	RWJ1803120KQ	FLAT CABLE(3P)	
		GND PART(S)	
E1, 2	SNE1004-1	GND PLATE	
E3	SUSD165	GND SPRING	

RESISTORS & CAPACITORS

Notes : * Capacity valuse are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R1, 2	ERDS2TJ683	1/4W 68K
R3, 4	ERDS2TJ151	1/4W 150
R5, 6	ERDS2TJ101	1/4W 100
R7, 8	ERDS2TJ153	1/4W 15K
R9, 10	ERDS2TJ564	1/4W 560K
R11-14	ERDS2TJ103	1/4W 10K
R15, 16	ERDS2TJ682T	1/4W 6.8K
R17-22	ERDS2TJ223	1/4W 22K
R23, 24	ERDS2TJ331	1/4W 330
R25, 26	ERDS2TJ182	1/4W 1.8K
R27, 28	ERDS2TJ682T	1/4W 6.8K
R29, 30	ERDS2TJ562	1/4W 5.6K
R31, 32	ERDS2TJ561	1/4W 560
R33, 34	ERDS2TJ472	1/4W 4.7K
R35, 36	ERDS2TJ273	1/4W 27K
R37, 38	ERDS2TJ104	1/4W 100K
R39, 40	ERDS2TJ153	1/4W 15K
R41, 42	ERDS2TJ273	1/4W 27K
R43, 44	ERDS2TJ682T	1/4W 6.8K
R45, 46	ERDS2TJ392T	1/4W 3.9K
R47, 48	ERDS2TJ102	1/4W 1K
R49, 50	ERDS2TJ221	1/4W 220
R53, 54	ERDS2TJ151	1/4W 150
R55, 56	ERDS2TJ332	1/4W 3.3K
R57, 58	ERDS2TJ392T	1/4W 3.9K

Ref. No.	Part No.	Values & Remarks
R59, 60	ERDS2TJ562	1/4W 5.6K
R61, 62	ERDS2TJ222	1/4W 2.2K
R63, 64	ERDS2TJ183T	1/4W 18K
R65, 66	ERDS2TJ123	1/4W 12K
R67, 68	ERDS2TJ683	1/4W 68K
R201	ERJ6GEYJ333V	1/10W 33K
R202	ERJ6GEYJ683V	1/10W 68K
R203-205	ERJ6GEYJ1R5V	1/10W 1.5
R206	ERJ8GEYJ222V	1/8W 2.2K
R207	ERJ6GEYJ182V	1/10W 1.8K
R208	ERJ6GEYJ222V	1/10W 2.2K
R209-211	ERJ6GEYJ4R7V	1/10W 4.7
R212, 213	ERJ6GEYJ152V	1/10W 1.5K
R214	ERJ6GEYJ822V	1/10W 8.2K
R215	ERJ6GEYJ101V	1/10W 100
R216	ERJ8GEYJ222V	1/8W 2.2K
R301, 302	ERDS2TJ222	1/4W 2.2K
R304	ERDS2TJ102	1/4W 1K
R305	ERDS2TJ682T	1/4W 6.8K
R306	ERDS2TJ271	1/4W 270
R308	ERDS2TJ1R0	1/4W 1.0
R309, 310	ERDS2TJ100	1/4W 10
R311, 312	ERDS2TJ183T	1/4W 18K
R313, 314	ERDS2TJ101	1/4W 100
R315, 316	ERDS2TJ154	1/4W 150K
R317, 318	ERDS2TJ333	1/4W 33K
R319	ERDS2TJ102	1/4W 1K
R320	ERDS2TJ822	1/4W 8.2K

Ref. No.	Part No.	Values & Remarks
R321	ERDS2TJ272T	1/4W 2.7K
R401, 402	ERDS2TJ562	1/4W 5.6K
R403, 404	ERDS2TJ243T	1/4W 24K
R405, 406	ERDS2TJ473	1/4W 47K
R407, 408	ERDS2TJ561	1/4W 560
R409	ERDS2TJ273	1/4W 27K
R410	ERDS2TJ151	1/4W 150
R451, 452	ERDS2TJ562	1/4W 5.6K
R453, 454	ERDS2TJ243T	1/4W 24K
R455, 456	ERDS2TJ222	1/4W 2.2K
R457, 458	ERDS2TJ332	1/4W 3.3K
R459, 460	ERDS2TJ242	1/4W 2.4K
R461-464	ERDS2TJ684	1/4W 680K
R465, 466	ERDS2TJ561	1/4W 560
R467	ERDS2TJ273	1/4W 27K
R468	ERDS2TJ151	1/4W 150
R469, 470	ERDS2TJ473	1/4W 47K
R471-474	ERDS2TJ222	1/4W 2.2K
R501	ERDS2TJ223	1/4W 22K
R502	ERDS2TJ821	1/4W 820
R503	ERDS2TJ223	1/4W 22K
R504	ERDS2TJ821	1/4W 820
R505	ERG1SJ150E	1W 15
R506	ERG1SJ180E	1W 18
R507, 508	ERDS2TJ472	1/4W 4.7K
R509	ERDS2TJ223	1/4W 22K
R510	ERDS2TJ821	1/4W 820
R511	ERDS2TJ822	1/4W 8.2K

Ref. No.	Part No.	Values & Remarks
R512	ERDS2TJ182	1/4W 1.8K
R513	ERDS2TJ682T	1/4W 6.8K
R514	ERDS2TJ152	1/4W 1.5K
R515	ERDS2TJ332	1/4W 3.3K
R516	ERDS2TJ103	1/4W 10K
R517	ERDS2TJ223	1/4W 22K
R518	ERDS2TJ821	1/4W 820
R519	ERDS2TJ103	1/4W 10K
R520	ERDS2TJ102	1/4W 1K
R521, 522	ERDS1FVJ180T	1/2W 18 ⚠
R523	ERDS2TJ332	1/4W 3.3K
R524	ERDS2TJ222	1/4W 2.2K
R525	ERDS2TJ473	1/4W 47K
R526	ERDS2TJ223	1/4W 22K
R527	ERDS2TJ562	1/4W 5.6K
R528	ERDS2TJ682T	1/4W 6.8K
R529, 530	ERDS2TJ103	1/4W 10K
R531	ERDS2TJ105T	1/4W 1M
R532	ERDS2TJ102	1/4W 1K
R533	ERDS2TJ103	1/4W 10K
R534	ERDS2TJ471	1/4W 470
R535, 536	ERDS2TJ103	1/4W 10K
R537, 538	ERDS2TJ472	1/4W 4.7K
R539, 540	ERDS2TJ681	1/4W 680
R542, 543	ERDS1FVJ3R3T	1/2W 3.3 ⚠
R544	ERDS2TJ331	1/4W 330
R545	ERDS2TJ102	1/4W 1K
R546	ERDS2TJ332	1/4W 3.3K
R547	ERDS2TJ222	1/4W 2.2K
R548, 549	ERDS2TJ472	1/4W 4.7K
R550	ERDS2TJ101	1/4W 100
R551, 552	ERDS2TJ103	1/4W 10K
R553	ERDS2TJ101	1/4W 100
R601, 602	ERDS2TJ472	1/4W 4.7K
R603	ERDS2TJ103	1/4W 10K
R604	ERDS2TJ472	1/4W 4.7K
R605	ERD2FCVJ4R7T	1/4W 4.7 ⚠
R606, 607	ERD2FCVJ6R8T	1/4W 6.8 ⚠
R608, 609	ERDS2TJ561	1/4W 560
R610, 611	ERDS2TJ101	1/4W 100
R612	ERD2FCVG270T	1/4W 27 ⚠
R614	ERD2FCVG270T	1/4W 27 ⚠
R615, 616	ERDS2TJ222	1/4W 2.2K
R617, 618	ERDS2TJ101	1/4W 100
R619	ERD2FCVG100T	1/4W 10 ⚠
R620, 621	ERDS2TJ391	1/4W 390
R622	ERD2FCVG100T	1/4W 10 ⚠
R623	ERD2FCVG330T	1/4W 33 ⚠
R624	ERDS2TJ471	1/4W 470
R625-636	ERDS2TJ470	1/4W 47
R637	ERDS2TJ223	1/4W 22K
R640-642	ERG1SJ390E	1W 39

Ref. No.	Part No.	Values & Remarks
R701	ERDS2TJ821	1/4W 820
R702	ERDS2TJ102	1/4W 1K
R703	ERDS2TJ122	1/4W 1.2K
R704	ERDS2TJ152	1/4W 1.5K
R705	ERDS2TJ182	1/4W 1.8K
R706	ERDS2TJ222	1/4W 2.2K
R707	ERDS2TJ332	1/4W 3.3K
R708	ERDS2TJ472	1/4W 4.7K
R709	ERDS2TJ682T	1/4W 6.8K
R710	ERDS2TJ123	1/4W 12K
R711	ERDS2TJ821	1/4W 820
R712	ERDS2TJ102	1/4W 1K
R713	ERDS2TJ122	1/4W 1.2K
R714	ERDS2TJ152	1/4W 1.5K
R715	ERDS2TJ182	1/4W 1.8K
R716	ERDS2TJ222	1/4W 2.2K
R717	ERDS2TJ332	1/4W 3.3K
R718	ERDS2TJ472	1/4W 4.7K
R719	ERDS2TJ271	1/4W 270
R720	ERDS2TJ181T	1/4W 180
R721	ERDS2TJ472	1/4W 4.7K
R722	ERDS2TJ332	1/4W 3.3K
R723, 724	ERDS2TJ180T	1/4W 18
R725, 726	ERDS2TJ332	1/4W 3.3K
R727, 728	ERDS2TJ330	1/4W 33
R729, 730	ERDS2TJ100	1/4W 10
R731, 732	ERDS2TJ102	1/4W 1K
R733, 734	ERDS2TJ472	1/4W 4.7K
R901	ERDS2TJ222	1/4W 2.2K
R902	ERDS2TJ823T	1/4W 82K
R903	ERDS2TJ101	1/4W 100
R904	ERDS2TJ393	1/4W 39K
R905	ERDS2TJ822	1/4W 8.2K
R906	ERDS2TJ102	1/4W 1K
R907	ERDS2TJ473	1/4W 47K
R908	ERDS2TJ223	1/4W 22K
R909, 910	ERDS2TJ563	1/4W 56K
R911, 912	ERDS2TJ393	1/4W 39K
R913, 914	ERDS2TJ220T	1/4W 22
R915, 916	ERDS2TJ101	1/4W 100
R917, 918	ERDS2TJ152	1/4W 1.5K
R920	ERDS2TJ152	1/4W 1.5K
R921	ERDS2TJ220T	1/4W 22
R922	ERDS2TJ392T	1/4W 3.9K
R923	ERDS2TJ103	1/4W 10K
R924	ERDS2TJ332	1/4W 3.3K
R925, 926	ERDS2TJ472	1/4W 4.7K
R927	ERDS2TJ223	1/4W 22K
R928	ERDS2TJ123	1/4W 12K
R929	ERDS2TJ682T	1/4W 6.8K
R930	ERDS2TJ473	1/4W 47K
R931	ERDS2TJ102	1/4W 1K

Ref. No.	Part No.	Values & Remarks
R932, 933	ERDS2TJ103	1/4W 10K
R934	ERDS2TJ333	1/4W 33K
R935	ERDS2TJ103	1/4W 10K
R936	ERDS2TJ392T	1/4W 3.9K
R937	ERDS2TJ272T	1/4W 2.7K
R938	ERDS2TJ103	1/4W 10K
R939	ERDS2TJ822	1/4W 8.2K
R940	ERDS2TJ472	1/4W 4.7K
R941	ERDS2TJ102	1/4W 1K
R942	ERDS2TJ560T	1/4W 56
R943	ERDS2TJ103	1/4W 10K
R944	ERDS2TJ1R0	1/4W 1.0
R945	ERDS2TJ391	1/4W 390
R946	ERDS2TJ101	1/4W 100
R947	ERDS2TJ333	1/4W 33K
R948, 949	ERDS2TJ473	1/4W 47K
R950	ERDS2TJ223	1/4W 22K
R951	ERDS2TJ821	1/4W 820
R953	ERDS2TJ273	1/4W 27K
R954	ERDS2TJ392T	1/4W 3.9K
R955	ERDS2TJ273	1/4W 27K
R956, 957	ERDS2TJ271	1/4W 270
R958	ERDS2TJ472	1/4W 4.7K
R959	ERDS2TJ222	1/4W 2.2K
R960	ERDS2TJ392T	1/4W 3.9K
R961	ERDS2TJ473	1/4W 47K
R962	ERDS2TJ821	1/4W 820
R963, 964	ERDS2TJ153	1/4W 15K
R965	ERDS2TJ682T	1/4W 6.8K
R966	ERDS2TJ103	1/4W 10K
R967	ERDS2TJ223	1/4W 22K
R968	ERDS2TJ103	1/4W 10K
R969	ERDS2TJ562	1/4W 5.6K
R970	ERDS2TJ332	1/4W 3.3K
R971	ERDS2TJ272T	1/4W 2.7K
R971A	ERDS2TJ221	1/4W 220
R972	ERDS2TJ272T	1/4W 2.7K
R972A	ERDS2TJ183T	1/4W 18K
R973	ERDS2TJ822	1/4W 8.2K
R973A	ERDS2TJ221	1/4W 220
R974	ERDS2TJ822	1/4W 8.2K
R974A	ERDS2TJ183T	1/4W 18K
R975	ERDS2TJ103	1/4W 10K
R976	ERDS2TJ273	1/4W 27K
R977	ERDS2TJ473	1/4W 47K
R978	ERDS2TJ393	1/4W 39K
R979	ERDS2TJ473	1/4W 47K
R980	ERDS2TJ393	1/4W 39K
R981, 982	ERDS2TJ822	1/4W 8.2K
R983	ERDS2TJ181T	1/4W 180
		CHIP JUMPER(S)

Ref. No.	Part No.	Values & Remarks
J201-206	ERJ6GEY0R00V	CHIP JUMPER
		CAPACITORS
C1, 2	ECBT1H221KB5	50V 220P
C3, 4	ECEA0JK101	6. 3V 100U
C5, 6	ECQB1H562JF3	50V 5600P
C7, 8	ECQB1H152JF3	50V 1500P
C9, 10	ECBT1H470J5	50V 47P
C11, 12	ECEA1CK100B	16V 10U
C13, 14	ECQB1H152JF3	50V 1500P
C15, 16	ECQB1H153JF3	50V 0. 015U
C17, 18	ECQP1121JZ3	100V 120P
C19, 20	ECEA1EK4R7	25V 4. 7U
C21, 22	ECBT1H101KB5	50V 100P
C23, 24	ECQB1H562JF3	50V 5600P
C25, 26	ECBT1H221KB5	50V 220P
C27, 28	ECEA1HKR33	50V 0. 33U
C29, 30	ECEA1CK100B	16V 10U
C31, 32	ECQV1H683JZ3	50V 0. 068U
C33, 34	ECQB1H333JF3	50V 0. 033U
C35, 36	ECQB1H183JF3	50V 0. 018U
C37, 38	ECQV1H473JZ3	50V 0. 047U
C39, 40	ECQB1H123JF3	50V 0. 012U
C43, 44	ECQB1H223JF3	50V 0. 022U
C45, 46	ECEA1CK100B	16V 10U
C47, 48	ECKR1H103ZF5	50V 0. 01U
C49, 50	ECEA1HK010B	50V 1U
C51, 52	ECEA1HK0R1	50V 0. 1U
C201	ECUV1E153KBN	25V 0. 015U
C202	ECUV1E104KBN	25V 0. 1U
C203, 204	ECEV1CA100R	16V 10U
C205	ECUV1E104ZFN	25V 0. 1U
C206	ECUV1E104KBN	25V 0. 1U
C209-211	ECEV1EN100R	25V 10U
C212-214	ECUV1H103ZFN	50V 0. 01U
C215	ECUV1H472ZFN	50V 4700P
C216	ECUV1E562KBN	25V 5600P
C217-219	ECUV1E104ZFN	25V 0. 1U
C301-304	ECKR1H103ZF5	50V 0. 01U
C305, 306	ECKW1H222KB5	50V 2200P
C307	ECKD1H682KB	50V 6800P
C308	ECKR1H392KB5	50V 3900P
C309	ECEA1EK4R7	25V 4. 7U
C310	ECQP1153JZ	100V 0. 015U
C311, 312	ECBT1H470J5	50V 47P
C313, 314	ECKR1H473ZF5	50V 0. 047U
C315, 316	ECKR2H821KB5	500V 820P
C317, 318	ECBT1H121KB5	50V 120P
C319, 320	ECQV1H563JZ3	50V 0. 056U
C321, 322	ECQB1H223JF3	50V 0. 022U
C323, 324	ECQB1H103JF3	50V 0. 01U
C325, 326	ECBT1H561KB5	50V 560P
C327, 328	ECEA1EK100	25V 10U
C329, 330	ECKR1H473ZF5	50V 0. 047U
C401-404	ECQB1H222JF3	50V 2200P
C405, 406	ECEA1HUR56B	50V 0. 56U
C407, 408	ECEA1HKR33	50V 0. 33U
C409, 410	ECEA1EK4R7	25V 4. 7U
C451, 452	ECKT1H122KB	50V 1200P
C453, 454	ECKD1H152KB	50V 1500P
C455, 456	ECEA1EK4R7	25V 4. 7U
C457-460	ECQB1H222JF3	50V 2200P
C461, 462	ECEA1HUR56B	50V 0. 56U
C463, 464	ECEA1HKR33	50V 0. 33U
C465, 466	ECEA1EK4R7	25V 4. 7U
C501	ECEA1HK010B	50V 1U
C502	ECBT1E103ZF	25V 0. 01U
C503	ECEA1CN100SB	16V 10U
C504	ECEA1HK010B	50V 1U
C505	ECKR1H103ZF5	50V 0. 01U
C506	ECEA0JU470B	6. 3V 47U
C507	ECEA1EK4R7	25V 4. 7U
C508, 509	ECEA1VK100B	35V 10U
C510	ECEA1CN100SB	16V 10U
C511	ECBT1E103ZF	25V 0. 01U
C512	ECEA0JU470B	6. 3V 47U
C602	ECKR2H682PE	500V 6800P
C603	ECEA1HU221B	50V 220U
C605	ECKR2H682PE	500V 6800P
C606, 607	ECEA1EU222B	25V 2200U
C608	ECKR1H103ZF5	50V 0. 01U
C609	ECEA1AU221	10V 220U
C610	ECEA1AU101	10V 100U
C611-616	ECKR1H103ZF5	50V 0. 01U
C617	ECEA1AU101	10V 100U
C618	ECEA1EU222B	25V 2200U
C619-624	ECEA1AU102B	10V 1000U
C625, 626	ECEA1HK010B	50V 1U
C701, 702	ECEA1HK010B	50V 1U
C703	ECKR1H103ZF5	50V 0. 01U
C901	ECQB1H822JF3	50V 8200P
C902	ECEA1CK100B	16V 10U
C903	ECBT1H470J5	50V 47P
C904	ECEA1HK010B	50V 1U
C905, 906	ECEA1AU101	10V 100U
C907	ECEA0JK101	6. 3V 100U
C908	ECEA1AK101	10V 100U
C909	ECBT1E103ZF	25V 0. 01U
C910	ECEA1CK330	16V 33U
C911	ECEA0JU222B	6. 3V 2200U
C912	ECEA0JK101	6. 3V 100U
C913, 914	ECKR1H103ZF5	50V 0. 01U
C915, 916	ECQB1H122JF3	50V 1200P
C917, 918	ECEA1CK100B	16V 10U
C919, 920	ECQB1H103JF3	50V 0. 01U
C921	ECQB1H332JF3	50V 3300P
C922	ECQB1H273JF3	50V 0. 027U
C923	ECEA1CK100B	16V 10U
C925	ECKT1H223ZF	50V 0. 022U

Printed in Japan
H910608200 SN/HH/TN

ORDER NO. AD9111269S2

Service Manual

Supplement

Dolby NR-Equipped
Stereo Cassette Deck

Cassette Deck

RS-BX707

DOLBY B·C NR HX PRO*

*HX Pro headroom extension originated by Bang Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY", the double-D symbol, and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

Color

(K)...Black Type

Area

Country Code	Area	Color
(EB)	Great Britain.	(K)
(EG)	F.R. Germany and Italy./Continental Europe.	
(EP)	Poland.	

Please file and use this supplement manual together with the service manual for Model No. RS-BX707, Order No. AD9106170C2 (EB, EG) and AD9110236A2 (EP).

CHANGES

■ CHANGE IN REPLACEMENT PARTS LIST

Note: • Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

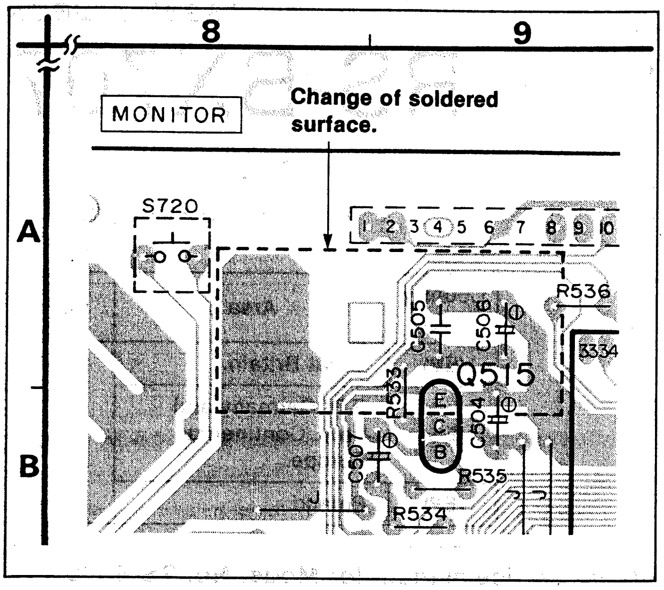
Ref. No.	Change of Part No.		Part Name & Description	Remarks
	ORIGINAL ➡	NEW		
CAPACITORS				
C3, 4	ECEA0JK101	**ECEA1AU101**	E. CAPACITOR, 10V, 100μF	
C327, 328	ECEA1EK100	**ECEA1VKA100B**	E. CAPACITOR, 35V, 10μF	
C512	—	**ECEA0JKA470B**	E. CAPACITOR, 6.3V, 47μF	Addition
C907	ECEA0JK101	**ECEA1AU101**	E. CAPACITOR, 10V, 100μF	
C912	ECEA0JK101	**ECEA1AU101**	E. CAPACITOR, 10V, 100μF	
CONNECTOR(S)				
CN2PA, 2PB	RJS1A1703	**RJS1A6603**	CONNECTOR (3P)	
CN60A, 60B	RJS1A1705	**RJS1A6605**	CONNECTOR (5P)	
CP1	RJP3G18ZA	**SJTD313**	CONNECTOR (3P)	
CP16	RJT057W004	**RJT057W004-1**	CONNECTOR (4P)	
CP110	RJT057W004	**RJT057W004-1**	CONNECTOR (4P)	
CABINET AND CHASSIS				
5	XTBS3+8JFZ1		SCREW	**Change of Pcs**
14	RKU0009-2	**RKU0039**	BOTTOM BOARD	
18	RMC0139	**RMC0139-1**	SHIELD PLATE, P. TRANSFORMER	
51	XTB3+10JFZ		SCREW	**Change of Pcs**
56	XTB3+8JFZ		SCREW	**Change of Pcs**
57	—	**XTB3+12JFZ**	SCREW	Addition
ACCESSORIES				
A4	SFDAC05E03	**RJA0019-1K**	AC POWER SUPPLY CORD	(EG, EP) ⚠

Technics

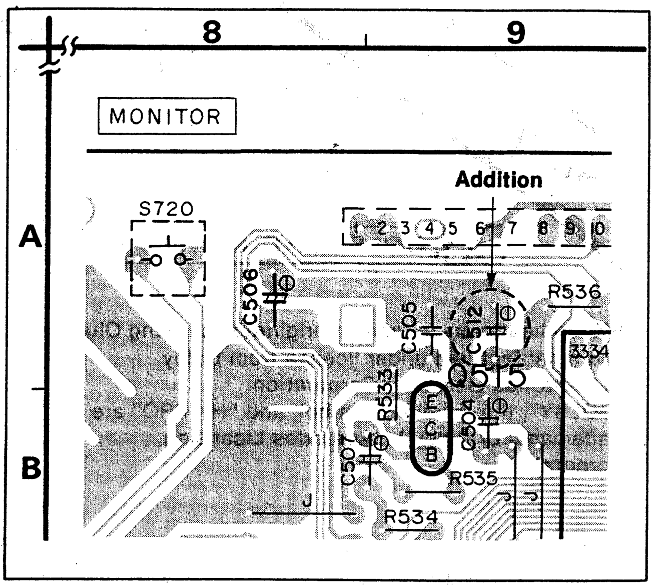
PRINTED CIRCUIT BOARDS (See page 16.)

D FL DRIVE P.C.B.

(ORIGINAL)


8
9
A
B
MONITOR
Change of soldered surface.
S720
1 2 3 4 5 6 7 8 9 10
R536
C505
C506
3334
Q515
R533
E
C
B
C504
C507
R535
J
R534

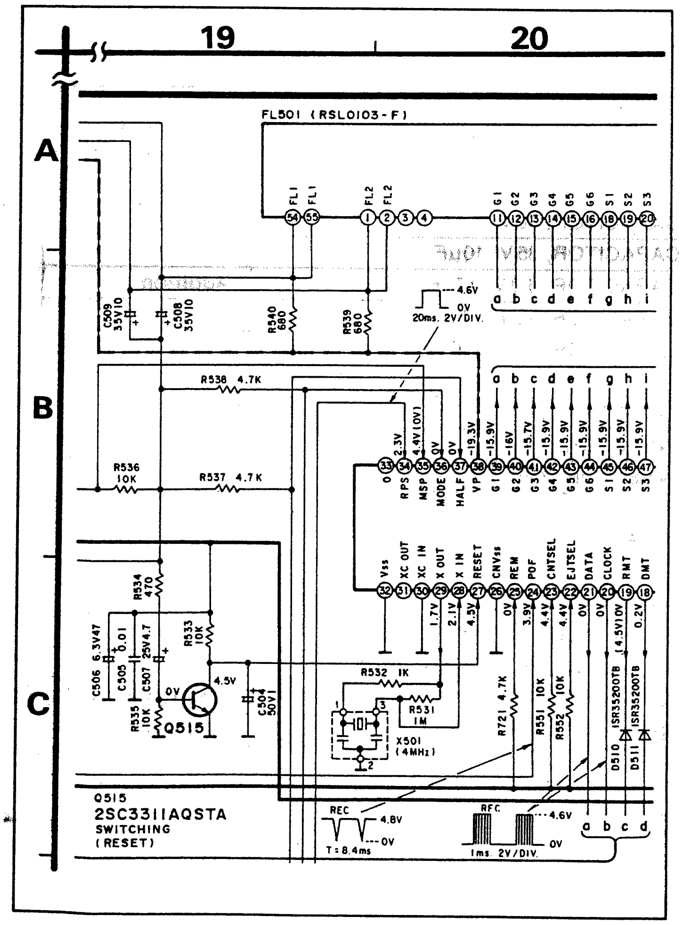
(NEW)


8
9
A
B
MONITOR
Addition
S720
1 2 3 4 5 6 7 8 9 10
C506
C505
C512
R536
3334
Q515
R533
E
C
B
C504
C507
R535
J
R534

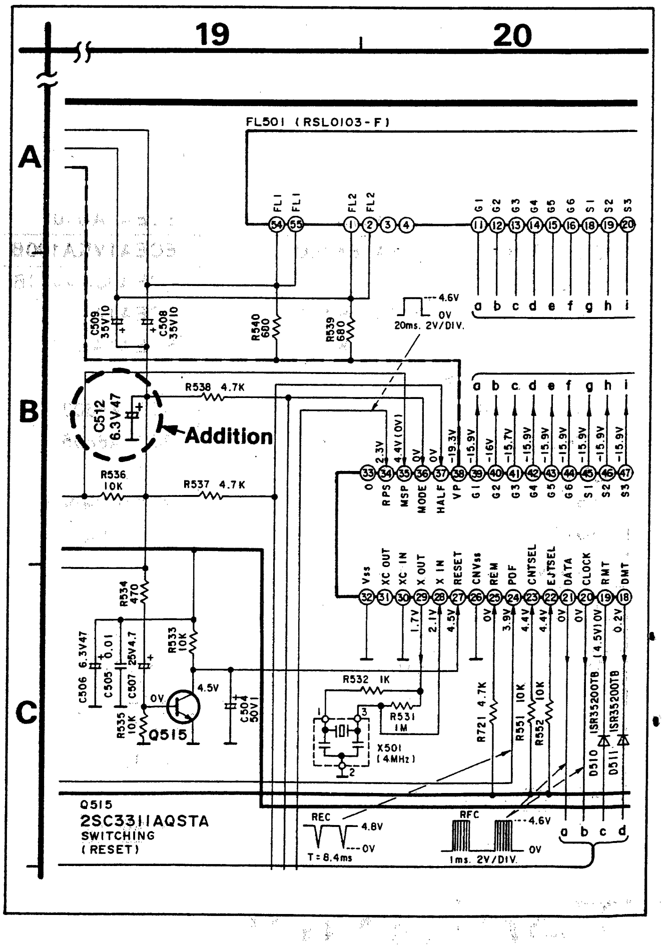
SCHEMATIC DIAGRAM (See page 23.)

D FL DRIVE CIRCUIT

(ORIGINAL)


19
20
A
B
C
FL501 (RSL0103-F)
FL1
FL2
G1 G2 G3 G4 G5 G6 S1 S2 S3
a b c d e f g h i
C509 35V10
C508 35V10
R540 680
R539 680
4.6V
0V
20ms. 2V/DIV.
R538 4.7K
R536 10K
R537 4.7K
RPS MSP MODE HALF VP G1 G2 G3 G4 G5 G6 S1 S2 S3
Vss XC OUT XC IN X OUT X IN RESET CNVss REM POF CNTSEL EJTSEL DATA CLOCK RMT DMT
R534 470
R533 10K
C506 6.3V47
C505 0.01
C507 25V4.7
C504 50V1
R535 10K
Q515
4.5V
0V
R532 1K
R531 1M
X501 (4MHz)
R721 4.7K
R551 10K
R552 10K
D510 1SR35200TB
D511 1SR35200TB
Q515
2SC3311AQSTA
SWITCHING
(RESET)
REC
4.8V
0V
T=8.4ms
RFC
4.6V
0V
1ms. 2V/DIV.
a b c d

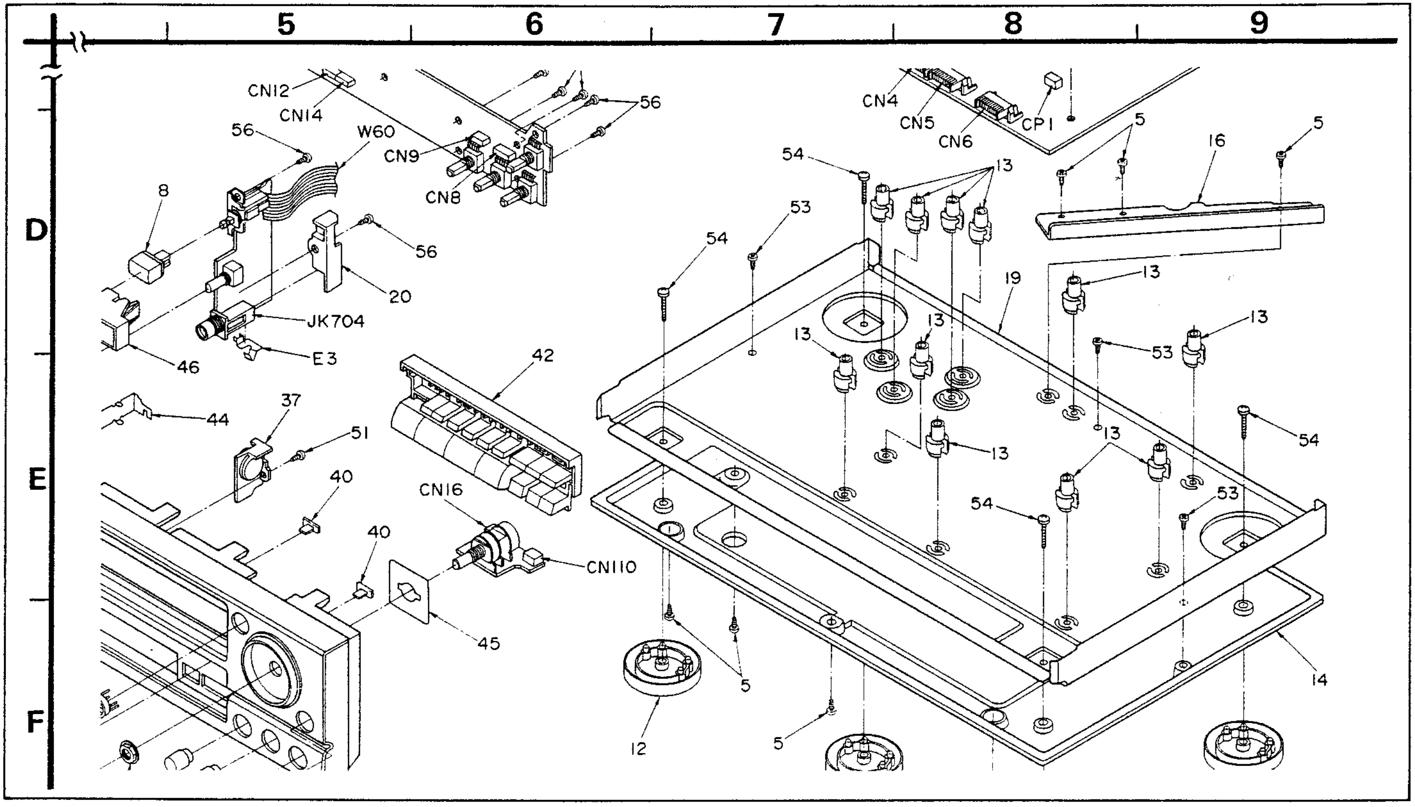
(NEW)


19
20
A
B
C
FL501 (RSL0103-F)
FL1
FL2
G1 G2 G3 G4 G5 G6 S1 S2 S3
a b c d e f g h i
C509 35V10
C508 35V10
R540 680
R539 680
4.6V
0V
20ms. 2V/DIV.
C512 6.3V47
Addition
R538 4.7K
R536 10K
R537 4.7K
RPS MSP MODE HALF VP G1 G2 G3 G4 G5 G6 S1 S2 S3
Vss XC OUT XC IN X OUT X IN RESET CNVss REM POF CNTSEL EJTSEL DATA CLOCK RMT DMT
R534 470
R533 10K
C506 6.3V47
C505 0.01
C507 25V4.7
C504 50V1
R535 10K
Q515
4.5V
0V
R532 1K
R531 1M
X501 (4MHz)
R721 4.7K
R551 10K
R552 10K
D510 1SR35200TB
D511 1SR35200TB
Q515
2SC3311AQSTA
SWITCHING
(RESET)
REC
4.8V
0V
T=8.4ms
RFC
4.6V
0V
1ms. 2V/DIV.
a b c d

EXPLODED VIEWS (See pages 33, 34.)

- **Cabinet parts**

(ORIGINAL)


5
6
7
8
9
D
E
F
CN12
CN14
56
W60
CN9
CN8
56
8
56
20
JK704
E3
46
44
37
51
40
40
CN16
CN110
45
42
CN4
CN5
CN6
CP1
5
5
16
54
13
53
54
19
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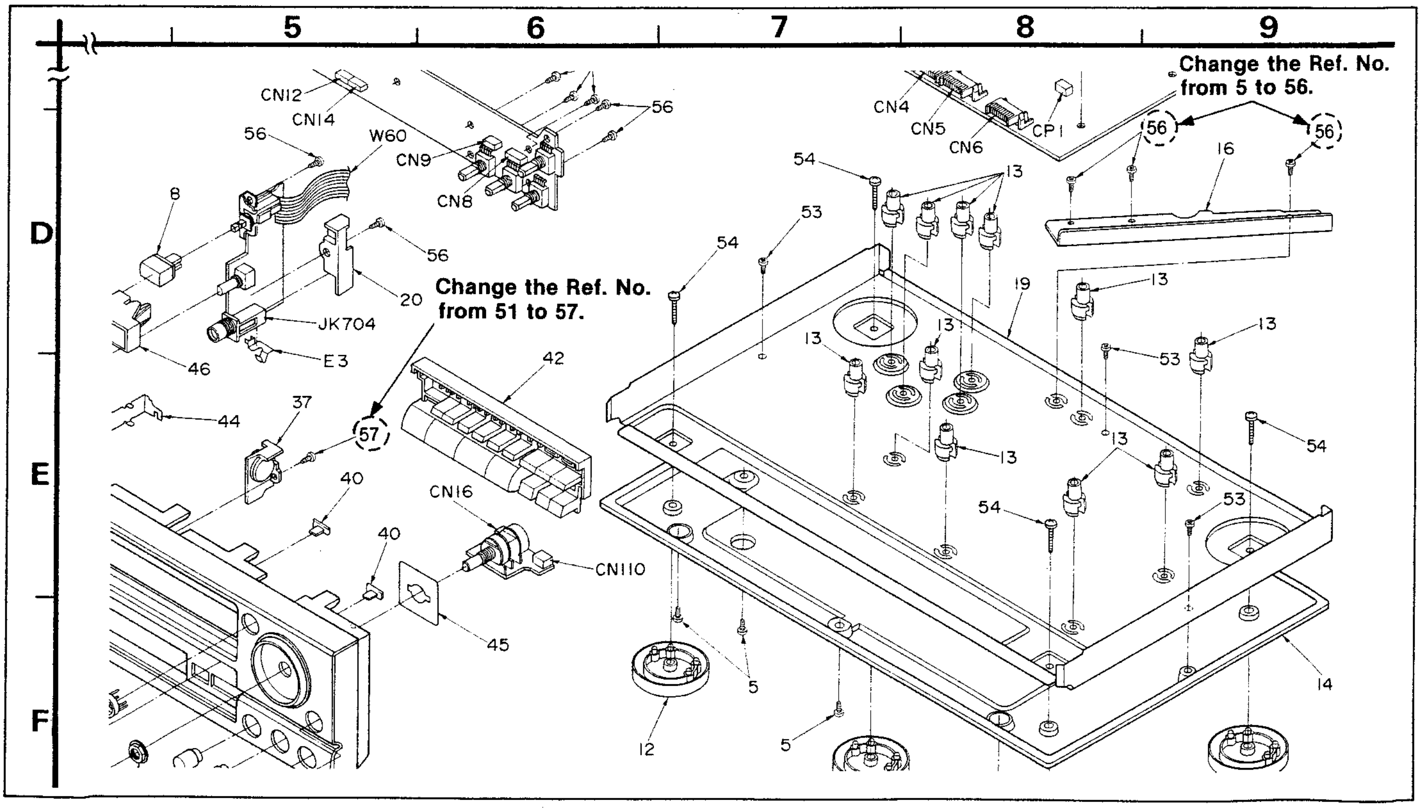
13
13
53
13
13
54
54
53
5
12
5
14

(NEW)


5
6
7
8
9
D
E
F
CN12
CN14
56
W60
CN9
CN8
56
8
56
20
JK704
E3
46
44
37
57
40
40
CN16
CN110
45
42
CN4
CN5
CN6
CP1
56
56
16
54
13
53
54
19
13
13
13
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13
13
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54
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5
12
5
14

Change the Ref. No. from 5 to 56.

Change the Ref. No. from 51 to 57.

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